RAILROAD MODEL CRAFTSMAN

AUGUST 1966 - - 50¢

CARSTENS PUBLICATION

BLACKBURN'S ABERJONA VALLEY RR

ORANGE EMPIRE MUSEUM

•

MCKEEN CARS

•

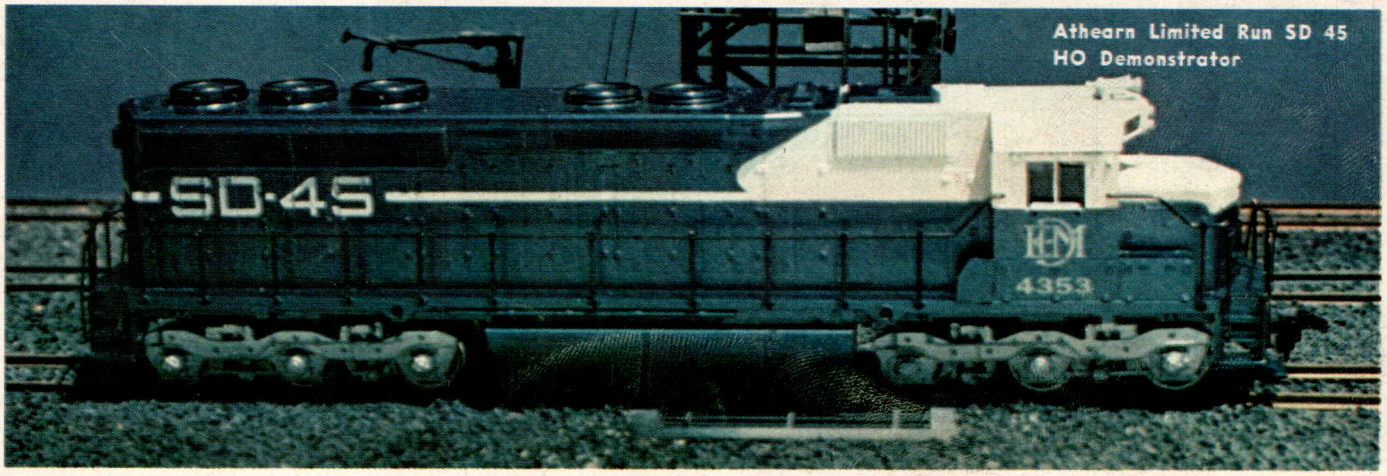
PSNJ SWEEPER

•

EMD 4351 SD 45 Demonstrator Sycamore, Ill.

SD-45 DEMONSTRATORS

EMD AND ATHEARN



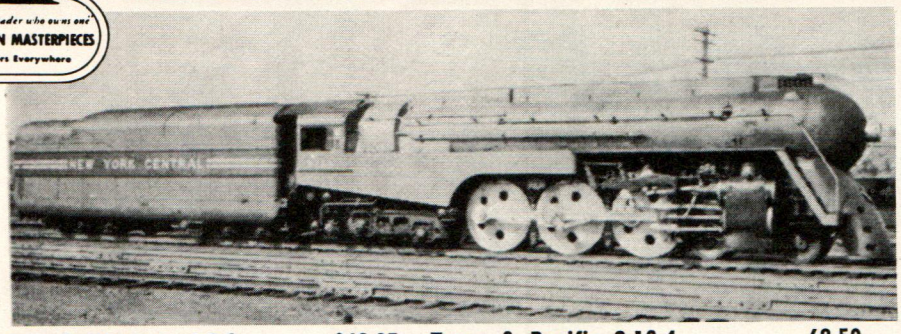
Athearn Limited Run SD 45 HO Demonstrator

BUILD THESE VULCAN DUPLEX - SLAUGHTER HOUSE

LMB MODELS

"Ask the model railroader who owns one" HO CRAFTSMEN MASTERPIECES At Better Dealers Everywhere

SEE THE ENTIRE LMB LINE IN OUR BIG NEW CATALOG . . .



New York Central Streamline Hudson "20th Century Limited"

"Pace Setter of Style and Prestige" Available with either Skull & Disc or Box Pox drivers & 12 wheel streamline tender

RTR 64.50

ALSO AVAILABLE

THE "EMPIRE STATE EXPRESS"

Styled similar to 20th Century with corrugations to match Budd Cars.

RTR 64.50

AVAILABLE SEPARATELY

PT Centipede Tender 24.50

Order Now...This Is a Limited Run

Norfolk & Western 4-8-0	$49.95
NYC H10b Mikado	59.50
B&M 2-8-4	69.50
UP 4-10-2	99.50
NYC (B&A) 2-8-4 Berkshire	64.50
Texas & Pacific 2-10-4	69 50
2-4-4T Forney	19.95
2-4-4T Forney (HOn3)	19.95
H. K. Porter Mogul 2-6-0	21.50
Burlington 2-8-2 Mikado	59.50

NEW LMB LOCOMOTIVE CATALOG
Beautifully illustrates and describes each locomotive, and our track and bulb accessories, Send Stamped Self Addresed Envelope or 10c address at right.

The Railroad Man's Favorite

See LMB Model Locos at better dealers everywhere. LMB Locos shipped to you prepaid. If your dealer does not have these send your order direct (and send us his name). All LMB Locos Ready to Run.

LMB MODELS
10101 Woodland Ave.
Cleveland, Ohio 44104

Blum's Hobby House . . . 800 Huron Rd. . . . Cleveland, Ohio 44115

ATHEARN GP-35

$11.88 R.T.R.

All eight wheels powered. New POWER-FUL motor and gear boxes. Excellent detailing.

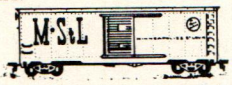
Athearn New SW-1500 Cow & Calf

Gear Drive, Super Details, Power Loco, Dummy Calf. Both $13.88

Ready To Run Cars

ATHEARN, TYCO, VARNEY, AHM, LIONEL, many others.

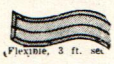
99c



12 for $10.88

Asst. reefers, box cars, flat cars, gondolas, tank cars, cabooses. Our choice of roads.

CORK ROADBED



(Flexible, 3 ft. sec.)

24/4.99

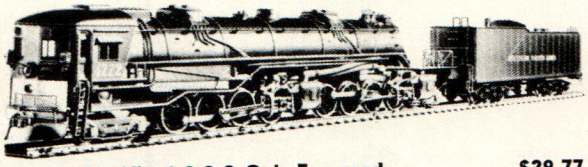
HO RAIL Code 100

99 Ft. Bundle

Brass	$2.98
Nkl. Sil.	$4.75
RAIL JOINERS	
Brass	45c
N. S.	60c

UNHEARD of SAVINGS on FINE LOCOMOTIVES

Quantities Limited



South. Pacific 4-8-8-2 Cab Forward,	$29.77
Norfolk & Western 2-8-8-2 Y6B,	26.66
Nickel Plate 2-8-4 Berkshire,	18.88
General Electric U25C,	12.88

(Road Names May Be Substituted)

SALE HO BUILDINGS

REVELL

Pass. Sta.	1.49
Track Side Bldgs.	1.49
Freight Sta.	1.19
Bakery	2.27
Weekly Herald	2.27
Farm Bldgs	1.49
Barn Group	1.49
Animals	.67
Figures	.67
Chicken Coop	.79
Engine House	1.99

PLASTICVILLE

Miniature Town	6.99
Railroad Center	3.33
Covered Bridge	.75
Windmill	.40
Colonial House	.39
Railroad Work Car	.64
Town Hall	1.25
Farm Animals	.42
Barn	.60
TV Station	.73
Picket Fence	.28

BIG TURNTABLE

We have them! Ready to install with track. 16" Diameter

Lionel or American Flyer	24.95
HO	19.95

O GAUGE SCALE

UP 4-8-8-4 Big Boy	360.00
UP 2-10-2	218.00
UP 4-8-2	218.00
UP 2-8-0	162.50
C&O 2-8-2	198.00
C&O 2-6-6-6	395.00
SP AC-9	327.00
Burlington 4-8-4	219.00
Pennsylvania DDI Electric	169.50
C&O 2-8-4	219.00
GP 35	162.50

LIONEL

2322	Va, Tr'master Diesel, horn, hdlte. Magna-tract'n, 2 Motors, reg. $65	49.95
6175	Rocket Carrying Car, reg. $6	3.99
6264	Lumber Car, reg. $6.00	2.49
6807-10	Military Flat Car, reg. $6	2.97
224	Twin Diesel Units USN, reg. $25	18.77
6805	Atomic Energy Car, reg. $7	2.59
6812	Track Maintenance Car, reg. $6	2.44
6844	Missile Carrying Car, reg. $6	3.19
2383	ATSF, AA Units, 2 Motors, reg. $65	49.95
773	Semi-scale Hudson loco and tender w/s and wh., reg. $90	71.50
736	Berkshire, s & wh., reg. $50	37.50
	35 Watt Tranformer, reg. $6	3.79
	LW, 125 W Transformer, reg. $20	14.88
3662	Operating milk car, reg. $15	11.77
6464-735	New Haven Box Car, reg. $6	4.29
6361	Timber transport car, reg. $6	4.44
6315	Chemical Tank Car, reg. $6	4.44
6437	Illuminated Caboose, reg. $6	3.59
6017	Caboose, reg. $3.50	.97
6119	Work & boom car, reg. $3.50	1.88
6416	Boat Transport car, reg. $7	3.99
6500	Aircraft Transp't car, reg. $6	1.49
120	Super O crossing, 90 deg.	1.00
1047	Switchman w/flag, reg. $7	4.19

AMERICAN FLYER

21234	C&O GP 7, Ringing Bell	$25.00	$18.88
20290	350w Dual Trans. C.B.	35.00	24.88
24222	Covered Hopper	3.50	2.67
24329	Chemical Tank	4.50	3.39
24577	Jet Engine Trans	5.00	2.14
24720	Old Time Coach	5.00	1.97
25071	Operating Tie Ejc. Car	5.00	2.69
25059	Motorized Rocket Sled & Rocket Launcher Car	18.95	5.88
26323-24	Pike Master manuel switcher R.H. or L.H.	3.00	1.94
23761	Automatic Semaphore Sig.	9.00	3.97
24054	Santa Fe Box Car, reg. $5		3.77
24057	Mounds Co. Box Car, reg. $5		2.97
21422	Great Northern Reefer, reg. $5		2.99
24579	Multipurpose Car, reg. $6		2.49
26745	90° Cross Over, reg. $2.98		1.79
26782	26-pc. Plastic trestle set, reg. $5		1.49
23830	Piggy-Back Unloader, set reg. $8.50		2.97

10-in-1 Miniature Machine Shop

Complete home workshop. Converts to 10 different tools for all hobby uses. 16" long Unimat.

$139.50

Your ORDER MAILED the SAME DAY RECEIVED! GUARANTEED FAST, SAFE DELIVERY — ANYWHERE

BLUM'S HOBBY HOUSE, Inc. Dept. RMC 800 Huron Road Cleveland 15, Ohio Please send me:

Have:
- ☐ HO Ready-to-Run
- ☐ American Flyer
- ☐ HO Scale
- ☐ Lionel O
- ☐ Lionel 027
- ☐ O Scale

We Ship Anywhere in the World

I want Reference Cat.
- ☐ '66 Lionel price folder 10c
- ☐ '66 American Flyer folder 10c
- ☐ HO Sale List 10c
- ☐ Pac. Fast Mail Cat. 50c NEW
- ☐ LMB Mod. Illus. Cir. 10c or SAE
- ☐ HO CATALOG $1.00
- ☐ New '66 O SCALE folder 25c

Postage and insurance—75c on HO, $1.00 on Lionel and AF
$1.75 on Lionel and Flyer orders over $20.00 Brass Locos Prepaid outside USA

Minimum Order on 3 ft. Track Sections—6 secs. Track Postage $1.75 west of Mississippi

Add 10% Total for postage

☐ Check ☐ Money Order

MINIMUM ORDER $3.00

HO Catalog

Fabulous Reference Guide! Describes and pictures all wanted items, Kits, Ready to Run, Imports —everything in HO at Hobby House. Fantastic, complete selection . . . low, low prices. Get your personal copy today 1.00

Big Lionel Bargains

027 SUPER O O GAUGE

'66 Super Prices. Huge selection. Unique items. Every available extra. Nation's largest Lionel stock. Low prices. Bargain Circular 10c

"0" Gaugers New Sale

Brand New Folder custom locos, cars, kits, trk., etc., 1000 items 25c

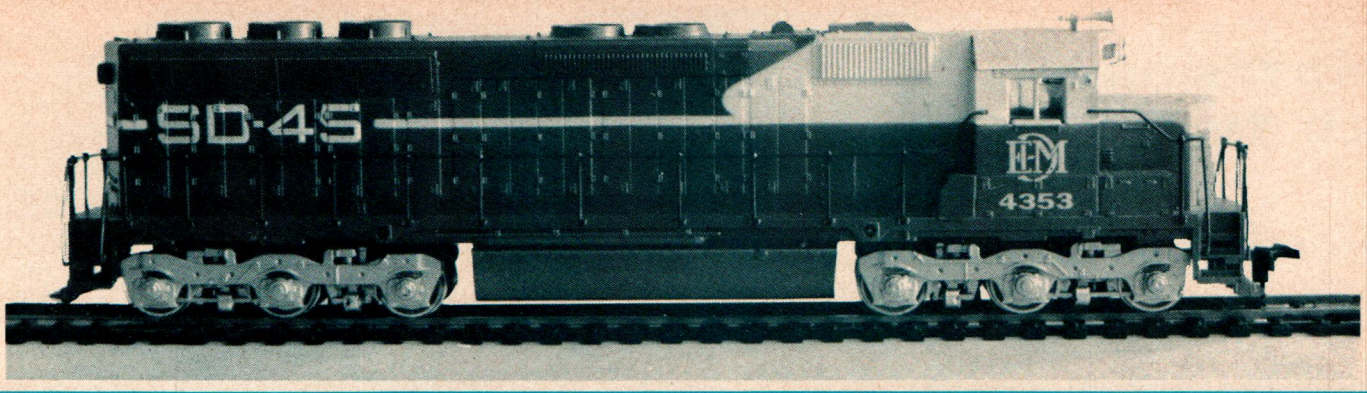
American Flyer Bargains

Lowest prices. Nation's biggest Flyer dealer. Biggest Selection. Bargain Circular. Save! Save! Save!.... 10c

WE STOCK & SERVICE WORLD'S LARGEST SELECTION LIONEL AMERICAN, FLYER AND HO EQUIPM'T. $250,000 INVENTORY

Buy On Credit

15% down payment on any locos or merchandise, balance 90 days, 6 months, 1 year. Up to $1,000 plus service charges. Send self-addressed stamped envelope with order, employment and complete confidential information.



AN ATHEARN LIMITED RUN!

TRAINS
Athearn
IN MINIATURE

Perhaps you've seen a pair of these giant Electro-Motive demonstrators in sparkling blue and white coloring with silvery trucks, handling some long freight at speed on your own favorite rairoad. These 3600 hp. units are equipped with the most powerful 20-cylinder diesel engines ever to be installed in a locomotive.

ATHEARN'S model of the 3600 EMD SD-45 demonstrator faithfully captures all of the color and appeal of the prototype units now testing on railroads throughout the country. ATHEARN'S HO replica is a special LIMITED RUN only, not part of the regular SD-45 line. Once these are gone, there can be no more. The demonstrator SD-45 model is equipped with special silver colored trucks having matching cadmium nickel wheels with RP-25 wheel flanges. NMRA type horn coupler is mounted in a snap-fit gear box. Can be replaced in seconds if desired. ATHEARN'S blue and white EMD demonstrator SD-45 is a modelers' model. See it at your dealer's today. They're going fast.

The SD-45 is optionally available in these six road names, all part of the NEW ATHEARN line for 1966: Seaboard, Pennsylvania, Union Pacific, Santa Fe, Burlington, Southern Pacific.

$14.95 r-t-r

Matching SDP-40 passenger diesels, now also at your local dealer: New York Central, New Haven, Chicago & Northwestern, Baltimore & Ohio, Santa Fe, and Southern Pacific.

$14.95 r-t-r

METALLIC BLUE AND WHITE, LIMITED RUN, WHILE THEY LAST

ELECTRO-MOTIVE DEMONSTRATOR SD-45 **$14.95 r-t-r**

HAVE YOU SEEN THESE NEW BEAUTIES AT YOUR FAVORITE DEALER?

COMING SOON!
EMD DD-40

This new giant is a 6000 h.p. unit with 16 wheel drive. And the ATHEARN HO scale model **will have 16 wheel drive,** too!
Single motor _____$19.95
Twin motored _____$24.95

The GP-35

The Electro-Motive GP-35 is one of the most popular freight locomotives in operation today. ATHEARN is now bringing the unit to you in HO scale. All eight wheels powered, new POWER-FUL motor, with new Floating Power installation, usual superb detailing.

Price, r-t-r _____$12.95

The EMD SW-1500

The latest in the Electro-Motive line of heavy switchers, this ATHEARN creation will delight you. Eight wheel drive, POWER-FUL motor with Floating Power installation, priced at only $10.98, r-t-r.

ATHEARN

11929 S. Western Ave. Los Angeles, Calif. 90047

NOTES ON AN OLD TIMETABLE

Cincinnati's Sheraton-Gibson Hotel is the stage for the 1966 NMRA national convention, August 17-21, and while it may be difficult to match the spectacular scenery of the 1965 convention city of Vancouver, B. C.; this year's affair again promises to offer plenty of model railroad action. About 1000 will attend.

0 gauge and traction are expected to hold much of the limelight but somehow, the other scales always come in for their share. The model contest features several special events, notably the finals of the Brotherhood of Railroad Trainmen contest, which should see between 20-50 cabooses entered in competition, and the 9th annual Railroad Model Craftsman Trophy Award, for the model best displaying originality in craftsmanship. Several railroads offer good passenger service into Cincinnati, as do various alternate means of transportation.

N gauge seems slowly to be coming into its own. Most importers are reporting good sales of European N gauge lines. Now from California comes news of a new U. S. firm and an importer of Japanese N gauge equipment. The next big hurdles would involve a full fledged American line of equipment and acceptance by the serious modeler of 9mm. gauge trains.

The RMC staff is busy lining up a vast array of special features for the fast approaching fall season. Already on tap are a series of plans for assorted diesel types old and new, traction equipment, as well as passenger and freight cars, by half a dozen skilled modeler-draftsmen. There'll be a good variety of construction features, as well as layout articles and protoype information.

A few titles, at random, include plans for the GP-40 by George Trager, Russ Porter's famed Western Valley Railroad, a treatise of the popular switches (turnouts) and how to hook them up to switch machines by Whit Towers, and many others. We hope you'll be aboard.

AUGUST 1966 Vol. 35, No. 3

RAILROAD MODEL CRAFTSMAN

A CARSTENS PUBLICATION

AUDITED PAID CIRCULATION ABC

Including TOY TRAINS combined with ELECTRIC TRAINS and HOBBY RAILROADING, MINIATURE RAILROADING, MODEL & RAILWAY NEWS, THE O GAGER, and THE MODELMAKER (Est. 1924) Magazines.

THE CREW

HAROLD H. CARSTENS
EDITOR AND PUBLISHER

Viola Kaps, Art Director
Russell D. Porter, Midwestern Editor
William Schopp, Technical Editor
Naomi Drake, Dealer Service Dept.
Stephen Ahlstsedt, Shipping Dept.
Margaret Zabriskie, Finance Dept.
Eugenia Abbate, Billing Dept.
Elizabeth Dickson, Circulation Manager
Ida Kruse, Circulation
Phyllis M. Carstens, Asst. to the Publisher

SPECIAL FEATURES

33 Loco Builder Photos ..... Nos. 271-273
39 Aberjona Valley Railroad ..... Irving R. Blackburn
44 Boomer Trail ..... Photos from our Readers

PROTOTYPE AND PLANS

22 McKeen Motor Cars ..... Larry Jackman
26 Orange Empire Trolley Museum ..... Sharpe Delaney
30 Colorado Midland Car 100 ..... Russ Porter
34 89' Thrall Piggy Back Flat Car ..... Larry Jackman
34 Public Service New Jersey St. Sweeper Walter Olevsky
48 Electro-Motive Demonstrators ..... Jim Boyd

CONSTRUCTION & TECHNIQUE

16 Spratt & Kean Slaughter House ..... E. L. Moore
36 Vulcan Duplex Locomotive ..... Bill Schopp
42 Henderson Branch ..... Layout Doctor
50 Depot On a Crossing ..... Bruce C. Bowden

DEPARTMENTS

5 Safety Valve
10 Dispatchers Report
14 RMC Timetable
52 Exchange Place
54 Test Track
59 Trouble Shooting
66 Advertising Index

COVER

Electro-Motive's SD-45 Demonstrator 4353 caught on Ektachrome by Jim Boyd, in sparkling blue and white. See full story of EMD's new diesel line on page 48. Athearn's special run model of the SD-45 Demonstrator poses for its picture and appears remarkably true to the original. Staff Kodachrome.

SUBSCRIPTIONS: In U. S., Possessions, and Canada: $5 per year, $9 for two years, $12 for three years. Single copies 50c. Foreign postage $1 extra per year. All communications regarding subscriptions and changes of address should be sent to: Circulation Manager, Railroad Model Craftsman, P. O. Drawer C, Ramsey, New Jersey 07446.

RAILROAD MODEL CRAFTSMAN is published monthly by the Model Craftsman Publishing Corporation, 6 East Main Street, Ramsey, New Jersey 07446. Harold H. Carstens, President; Henry G. Carstens, Vice President; Robert R. Merkle, Treasurer; Phyllis M. Carstens, Secretary. Second Class postage paid at Ramsey, New Jersey, and Sparta, Illinois.

CONTRIBUTIONS: Articles, and photographs are welcome. Contributors are advised to retain a copy of their manuscripts and illustrations. When requested, we will endeavor to return all material in good condition if accompanied by return postage. Payment is made upon publication. The contents of this magazine must not be reprinted without written permission of the publisher. Copyright© 1966 by Model Craftsman Publishing Corporation. Printed in the U.S.A.

ADVERTISING: Main advertising offices, 6 East Main Street, Ramsey, New Jersey 07446. Phone area 201-327-1091. WEST COAST ADVERTISING REPRESENTATIVE: Joseph Mervish Associates, 4721 Laurel Canyon, Suite 211, North Hollywood, California 91607. Phone area 213-877-7556.

Sharply Reduced Prices on Viking HO Vehicles

Due to a recent reduction in tariff, famous VIKING precision quality is now within the reach of everyone!

51h Tractor-Trailer 14 wheels 1.50
51r Truck-Trailer 14 wheels 1.50
52 Refrig. Truck-Trailer..1.00
52a GMC Tractor only 60
52g Tractor-Trailer 14 wheels 1.50
53b Concrete Mixer Truck .75
53k Shell Tank Truck 60
53n Chem Tank Truck 14 wheel 1.50
54 Panel Truck 75
54a Trailer for above 40
55 Postal Truck 75
55a Trailer for above 40
56 Coca Cola Truck 75
56s Soft Drink Truck 75
57 Milk Truck w/cans 60
57p Horses & Wagon 60
58 New Car Transporter..1.50
59 16-wheel House Mover & Truck 1.50
60 Fire Chief's Car 40
60k Volkswagen Fire Truck 40
60p Foam Fire Truck 75
61 Fire Engine Pumper...60
61n Fire Engine Pumper, double Cab 95
62n Fire Engine, Ladder Truck, dbl cab 1.00
62 Fire Engine Ladder Truck 75
62r Fire Disaster Unit ..1.00
63 Tow Truck 50
63n New Tow Truck 60
64k Snow Plow Truck....60
64m Garbage Truck w/ pails 75
65 Steam Roller 75
65a Detour Horse, 3 to kit .40
65p Bulldozer 1.00
65s Construction Shuttle Truck 50
66 Power Shovel, mov. scoop 1.50
66k Track Crane w/2 pc. Boom 1.50
66m Mobile Crane, wheeled 1.50
67 Heavy Duty Dump Truck 95
67g Caterpillar earth mover 1.00
68 Heavy Duty wrecker .95
69 Street Car 1.00
69a Street Car trailer 95
70 Mercedes Pullman Bus .95
71 Mercedes School Bus, yellow 95
72 Observation Bus 1.25
72d Double-decker Bus ..1.95
72s Transit Bus 1.50
73 Shuttle Bus 1.00
77s Bicyclie w/Stand, kit..40
78 ESSO Tank Truck 60
78a ARAL Tank Truck ...60
79 ESSO Super Tank Truck 10-wheel 1.50
80 SHELL Tank Truck & Trailer 1.00
80a ARAL Tank Truck & Trailer 1.00
81 Service Station & Access. 60
81s SHELL Gas Station .1.00
82 Gas Pumps & accessories 40
84 Gas Attendants (4) 40
85 Grease Rack Hoist 40
86 Porters & Baggage Truck (2) 40
86n Baggage Truck & Porter 25
87 Walking Figures (7) ...40
88 Standing Figures (7) ...40
89 Traffic Policemen (5)..40
90 Stop Lights (2) kit ...40
103 Police Ambulance 40
103m Police Riot Truck w/seats 50
104 Police Squad Car 40
114 Garage w/lift door...50
114g Round Garage, large..75
114w Corrugated Steel Garage 50
114r Round Garage 50
115 Parking Shelter 95
116 Electric Baggage Truck 40
116a Trailer for above 25
117 Fork Lift Truck 40
130 Truck Loads, 20 pcs...30
133 Wheels & Axles for cars 40
134 Wheels & Axles for trucks 40
135 Hitches, 20 to bag ...40
150 Oil Drums, 10 pcs. ...40
153 Pallets for 117, 10 to bag 40
158 Loading Ramp 40
172 Luggage, 16 pcs. 40
214 Mercedes, boat and trailer 1.50
(in gift package).
VIKING Catalog 35

See June RMC for more Viking reduced price listings.

PECO N Gauge Flexible Track

SL300X Nickel-silver flex track, 36" (minimum order six pieces) $1.35
N-100 Foam roadbed for above 25' roll 1.98
SL310X Nickel-silver Rail Joiners, 24 49
SL311 Nykon insulating Rail Joiners, 12 49
SL340 Snap-on Rail Bumper, 2 in bag 49
SL388X High-speed Turnout, right 3.50
SL389X High-speed Turnout, left 3.50
SL79 Switch machine for subsurface mount 1.50
PECO is compatible to **Minitrix** & **Arnold-Rapido.**

ROKAL TT GA. MODEL TRAINS

01103 Prima I Set $19.95
01017 Old Timer Loco 12.95
01283 Old Timer Baggage Car 2.00
01284 Old Timer Pass. Car 2.00
01282 Compartment Car 2.60
01051 Swiss Electric Loco 21.95

ROKAL Catalog 60c
ROKAL Track Layouts Manual 75c
ROKAL Technical Manual 75c

MINITRIX OOO/N gauge Trains

NEW MODELS NOW AVAILABLE

1901 Old Timer Passenger Set....$19.95
1902 Old Timer Freight Set 19.95
2980 Rail Bus & Trailer 16.95
2914 Old Timer Locomotive 9.95
2930 Electric Loco, with operating pantagraphs and reversing headlights, a jewel, blue $19.95
2931 Electric Locomotive, same features as 2930, blue cream 19.95
2932 Electric Locomotive, same features as 2930 green 19.95
3010 Baggage Car, green 3.25
3011 Express Coach, green 3.25
3012 Dining Car, red 3.25
3013 Tourist Coach, blue 3.25
3014 Luxury, blue-cream car 3.25
3235 Stake Car, brown 2.50
3261 4-axle MOBIL Tank Car 3.50
3262 4-axle SHELL Tank Car 3.50
3263 4-axle ARAL Tank Car 3.50
3264 4-axle FINA Tank Car 3.50
4922 Full curved Track 9" rad....30
4924 4/5 curved Track 9" rad....25
4926 1/5 curved Track 9" rad....22
SL300X Flexible Track, 36" 1.35
(min. six pieces)

MINITRIX Catalog 35c

KIBRI AUTHENTIC HO KITS

8111 Four-story Apt. House $1.98
8200 Five-story Office Bldg. 3.95
8304 Two 3-story Old Town Bldgs....2.95
8306 Two 3-story Old Town Bldgs. 2.50
9487 Switch Control Tower 2.25
9490 Country Railroad Station 2.50
9602 Bridge Crane HD 2.50
9694 Girder Bridge, Open 2.50
9924 Utility Transformer Sta. 3.75

KIBRI Catalog 35c

MODEL SHIPS: Over 700 models of 1:1200-1250 ships from HANSA, NAVIS, VIKING, MERCATOR, DELPHIN, TRI-ANG, STAR, SCHLINGELHOF, MERCURY, SUPERIOR and ANGUPLAS.
Model Ship Catalog....35¢

HOBBIES • MODELS • IMPORTERS NRP

NATHAN R. PRESTON & CO.
P.O. Box 187 **Des Plaines, Illinois 60017**

SAFETY VALVE

Key to Better Hobby Shop Service

I've found the key to better hobby shop service. Order something through your local dealer, then go get it instanter when he tells you it has arrived. Our local boy is loaded with stuff he ordered that was never picked up and I've taken a lot of it off his hands.

So all during the rush season I've been buying kits, materials, books, and the like, and now that the summer season is here, I'm free to work. What's that you fellows said about the "slow" summer. Boy, its great.

J. C. Brigham, News Director
WDSL Radio
P. O. Box 404
Mocksville, N. C.

Chuck advises that he also heard the Sage of WCAU "last night" on the air. . Is there a station in the country without a model railroader on its staff? Ed.

Scale Railway Equip. NG Trucks

Regarding your recent mention of the On2 trucks by Scale Railway Equipment Co., these come nicely packed in a plastic box in a semi-assembled state. To do them justice, they should be taken apart and a small amount of flash and the parting line removed with fine files. The castings are beautiful and very delicate looking. Assembly is simple. The brass side frames have a cast, threaded lug on their obverse side, which passes through a strap brass bolster, and is then threaded with a brass nut which is adjusted to the proper tension for equalization and then soldered fast.

The remaining portion of the lug may then be nipped off. The wheel sets are fine scale to what appears an RP-25 contour. The flanges will clear spike heads on code 70 rail.

Dan C. Brosey
107 Crestmont St.
Reading, Pa. 19602

Want to Join a Club

Could you tell us how to join a model railroad club. It must be in New York City.

William & Robert Perlman
2733 Morris Ave.
Bronx 68, N. Y.

If you're under 16, chances are you'll have trouble getting into an adult organization. Suggest you try the Police Athletic League or the Grand Street Boys Association to see if they know of model clubs for your age level. Alternately, organize your own club. Organizations such as the Electric Railroaders Association and the Railroad Enthusiasts, and there are others, do permit serious minded youngsters to attend their meetings and join. Check with each group regarding specific membership requirements. Ed.

Diesel Details A Puzzlement

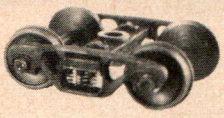
I know that most railroads followed different practices in the placement of pipes and other fittings on their steam locomotives but what about the placement of fittings on diesels?

Most models of the General Motors F-7 have the extra exhaust stack just behind the cab, for the dynamic brake gear usually found on freight units, yet the exhaust vents used on passenger steam heating equipment is also modeled.

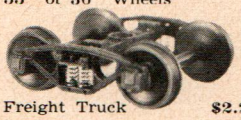
I have seen some Santa Fe FP-7A

GRACELINE
SCALE O GAUGE

NEW



A.S.F. 70-Ton Roller Bearing Truck 33" or 36" Wheels $3.25



A.A.R. 50-Ton Freight Truck $2.25

All trucks with our New prototype wheels.
FREDERICK MFG. 92316
10666 Linden Ave. Bloomington, Calif.

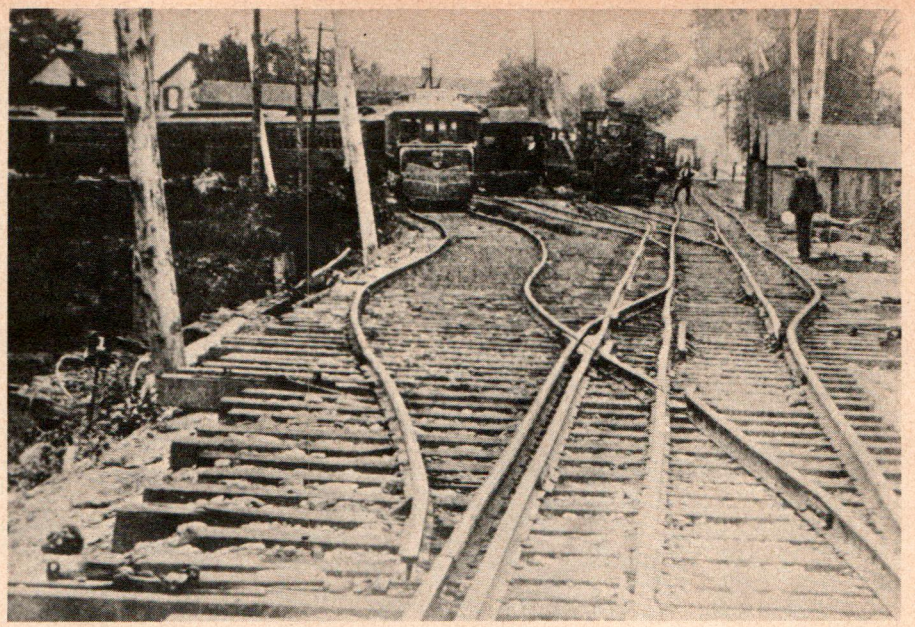
O MAIN LINE MODELS
36' STOCK CARS

OSC- 1 Swift Live Stock Express
OSC- 2 Armour Express
OSC- 3 Virginian
OSC- 4 New York Central
OSC- 5 Southern Pacific
OSC- 6 Great Northern
OSC- 7 Santa Fe
OSC- 8 Union Pacific
OSC- 9 Western Pacific
OSC-10 Pennsylvania
OSC-11 Missouri Pacific
OSC-12 M-K-T
OSC-13 Texas & Pacific
OSC-14 Southern
OSC-15 C.M. & O.
OSC-16 Wabash
OSC-17 Chicago & North Western
OSC-18 Denver & Rio Grande

NEW

Dealers and Direct Mail..... $9.95 less trucks

Main Line Models
P. O. Box 250 Falls Church, Va.



units that resemble the models having both the dynamic brake stack and the train heating boiler vents, but the steam heating vents are not found on the FP-7A units.

Union Pacific plans of the FP-7 list them as having dynamic brakes, yet they do not have the extra stack behind the cab. Instead they have louvre like grids similar to those on an F-3 on the roof behind the cab.

What particular railroad then did the manufacturers model as their F-7 since they seem to be a conglomeration of several railroads' detail placement?

Nathaniel Goodman
Salt Lake City, Utah

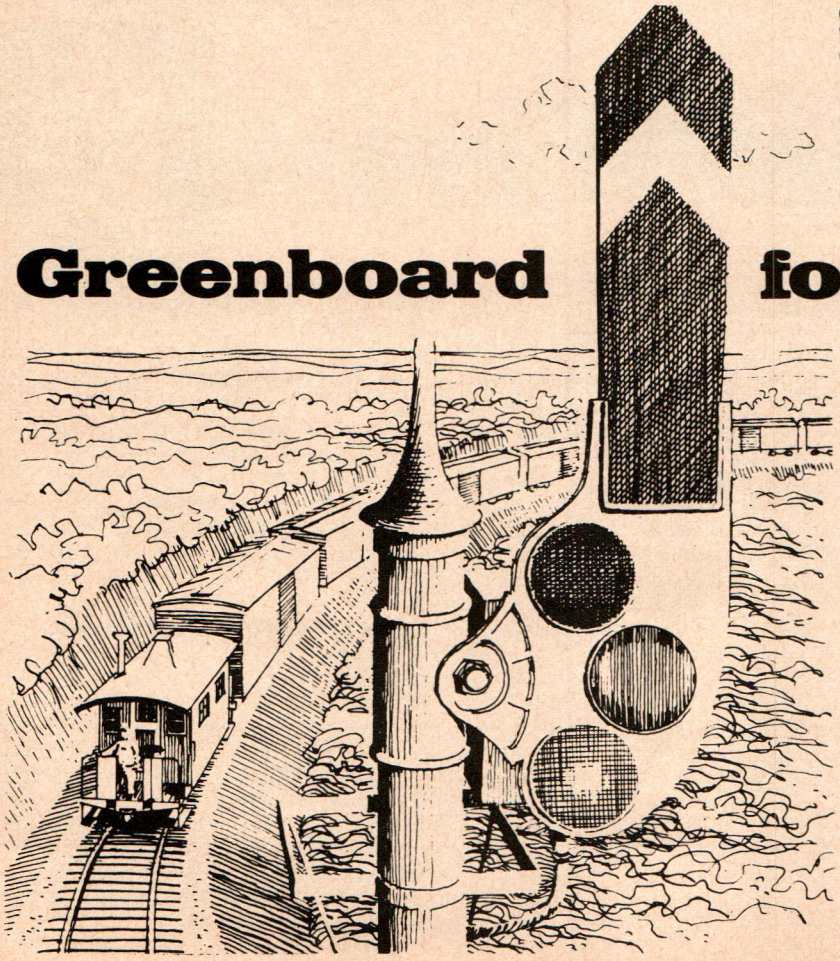
Manufacturers of diesel locomotive models normally get their data from official sources, supplemented with any other information available. Electro-Motive diesel models would normally be made by following official EMD blueprints provided

Casper, Wyoming . . . St. Petersburg, Florida . . . Waterloo, Ontario . . . Geneva, Switzerland . . . Columbus, Ohio . . . Sydney, Australia . . . Albany, New York . . . Argentina . . . France . . . England . . .

These are just some of the division points where Caboose No. 10 has made its appearance in the last year, and the Old Lady never had a better trip in her 90-odd years of life.

That's how all of us of the Brotherhood of Railroad Trainmen have come to think about our contest to

Greenboard for Cincinnati!



build models of old No. 10, where our organization got its start in 1883 — like a fresh, new journey for a fine old lady.

And what models we've been privileged to see along the line!

A judge (John Armstrong, down in Florida) said it better than we can:

"One of these models is perfect. Another is even better!"

Now the road's clear to the NMRA's convention in Cincinnati, where the best of these perfect models will be selected by a panel of professional judges — whose job, incidentally, we don't envy!

It's been a great trip for us, too. We've met a lot of you and we're frankly impressed. And grateful, too, for you have shown us beyond any doubt that the working railroader has a lot of friends — good ones. It's one trip we wouldn't have missed.

Greenboard for Cincinnati . . . See you there!

THE BROTHERHOOD OF RAILROAD TRAINMEN
666 Euclid Avenue, Cleveland, Ohio 44114

by the builder. It follows that individual railroads have many options as to minor details. Hence there will be differences in stacks and grills, headlight and horn placement, nose grab-iron arrangement, and a host of other minor details.

It would be impossible for any manufacturer to add or remove these details from production run models. Fortunately, the serious modeler can remove and add any detail he wishes, using parts by Cal-Scale and other suppliers to creat the exact model he wishes. Ed.

Throw Away Your Track Gauge

Enclosed find a photo of the Cincinnati, Georgetown & Portsmouth yards at Carrel St., in Cincinatti. The photo dates around 1902 or 1903. The double pole trolley in the foreground is an open bench double truck car that was used on the Coney Island run which ran from downtown Cincinnati to Coney Island. This line operated over the tracks of the Cincinnati Traction Co. to 5th and Sycamore Sts. in Cincinnati.

Naturally it was the 5' 2½" gauge as was the Cincinnati Traction Co., which at this time leased all of the property of the Cincinnati Street Railway. The line from Carrel Street, about 4 miles from downtown, to Georgetown, Ohio, was originally 3 ft. narrow gauge, opened in 1886.

The first electric operation on the line was the Coney Island line which opened in July 1902 and ran from Carrel St. to Coney Island Amusement Park, a distance of about 5 miles. Two open bench double truck cars made the run at 20 minute intervals. Later, to my knowledge, four more open bench cars were brought and two city style, closed double truck cars were also bought for this run. All of these cars came from Cincinnati Car Co.

The narrow gauge line to Georgetown was converted to standard gauge, after which heavy electric interurban cars were used on this line, which also began at Carrel St. It is my understanding that narrow gauge steam operated for about 8 or 10 years after the changeover to electric and that the entire line to Georgetown was both 3 ft. and 4 ft. X 8½ in. during this time. The line to Coney Island branched off the main line and at least part of this was both standard gauge and 5 ft. 2½ in. Some standard gauge cars were hauled on this line part of the way to the Cincinnati Water Works. Toward the end, the city operation stopped and the entire line was made standard gauge to Coney Island and the curve side interurbans of later years made the Coney Island run from Carrel St.

I came across the 4x5 negative while doing research for a book on the Cincinnati Street Railway which Rich Wagner and I are working on.

Roy Wright
4915 Andrew Ave.
Cincinnati, Ohio

ORDER BY MAIL FROM AHC FAMOUS BRANDS
AHC JAMBOREE OF VALUES
SAVE! STOCK UP!
SEE NEXT PAGE
AMERICA'S HOBBY CENTER, INC. 146C WEST 22nd. ST N.Y., N.Y. 10011

LOCOS
TYCO READY-TO-RUN SALE
0-4-0 SHIFTER LOCO & TENDER WITH SMOKE SPECIAL READY-TO-RUN S.P. OR B.&O. 10.88

SINCE 1931, MODEL BUILDERS THE WORLD OVER AGREE
IT PAYS TO BUY AT "AHC"
★ 14 DAY MONEY BACK GUARANTEE — Any unused item purchased from us can be returned in 14 days for full exchange or cash refund (less small handling cost).
★ BIG BONUS DEALS, SUBSCRIPTIONS, ETC. — To our regular customers we give free subscriptions to popular modeling magazines, or their equivalent value. Dozens of Big Bonus deals if you're on our mailing list.
★ BETTER VALUES — Our tremendous "cash purchasing power" enables us to make better buys — and offer you real bargains on hundreds of model railroad items.
★ FASTEST SERVICE — Nobody, but nobody can give faster service than AHC. We comparison shop! Our tremendous inventory enables us to process most orders and ship within 24 hours.
★ WE STOCK ALL FAMOUS BRANDS — You'll find all the model railroad "brand names" at AHC. New items (or old) if it's available anywhere, we have 'em.
★ SHOP WITH CONFIDENCE — Our famous "Money Back Policy" protects you. We guarantee safe delivery anywhere in the world.
★ HELPFUL HINTS & ADVICE — Our famous "Reader Service" department offers booklets, samples, etc.
★ THE BEST "POSTPAID" DEAL IN AMERICA — We pay all postage & packing on orders OVER $3.00. If your order is under $3.00, however, you pay only 25c for postage & packing — we pay any difference! Outside of U.S.A. see instructions on next page.

WE MATCH ANY OFFER
AHC matches any offer made by any other advertiser. Attach ANY ad in this issue to your order — and take advantage of the AHC "extras."

Athearn LOCO
READY-TO-RUN HI-F DRIVE
F7 DIESEL LOCO "A" UNIT 4.99
ROAD NAMES:- S.F.,B.& O., P.R.R.

VARNEY METAL BODY
DECORATED GG-1 READY-TO-RUN $29.95 24.98 KIT
VARNEY DOCKSIDE Ready-To-Run O-4-0 SWITCHER-NEW 5 POLE PER-MAG MOTOR WKG.LITES- 5.95
ATHEARN READY "HUSTLER" TO-RUN SALE 3.99 HI-F DRIVE
TYCO "Big Six" 8.25 KIT 0-6-0 Switcher
TYCO CAR KITS Sale WHILE THEY LAST 79¢ EACH REG. $2.49 EACH — ANY 6 FOR 4.39 ONLY WITH NMRA COUPLERS
4 WHEEL BOBBER CABOOSES B&O. CP. or ACL.
DERRICK CARS B&W. or READING
BUNK CAR R-T-R READY-TO-RUN ROADNAME: UP $1.00
SUPER BERKSHIRE KIT W/TENDER ALL METAL WORM GEAR DRIVE 49.98
VARNEY CASEY JONES 14.95 KIT ALL METAL-WORKING HEADLIGHTS-PER-MAG MOTOR. WITH TENDER.
Athearn SUPER POWERED GP 30 DIESEL READY-TO-RUN ATSF, CB&Q, UP. 10.95 KIT WITH MOTOR 8.95 DUMMY NO MOTOR KIT 2.95
R-T-R Athearn EMD SW-1500 POWERED COW UNDECOR., OR SF, SP, BURL., ILL CENT, UP, PRR, B & O. 10.98
POWERED CALF 10.98 DUMMY COW — SAME ROAD NAMES — 3.98 DUMMY CALF — 3.98
SILVER STREAK REEFERS
S403 N.P. S405 SP-UP S408 G.B.& W'N S410 S.F. S411 WAB.-MOPAC. S412 SWIFT KITS 2.95 S413 OSCAR MEYER S414 BURLG S415 N.W.
REEFERS S416 SP-UP S417 MORRELL S418 ICE SERVICE 3.45 KITS

LOCOS alm Rivarossi "Krauss-Maffei" DIESEL LOCO L 5050 Denver & Rio Grande L 5051 Southern Pacific 12.95 READY-TO-RUN
4-8-8-2 CAB FOWARD SOUTHERN PACIFIC..... $43.95
2-8-8-2 YGB MALLET PRR., S.FE, NORFOLK&WES— 39.95
2-8-4 BERKSHIRE — NKL.PLTE., PERE MAR. 27.95
TYCO READY TO RUN GENERAL 4-4-0 14.95 WITH SMOKE 18.95 9.75 KIT
Athearn's "RDC" READY-TO-RUN COACH or COMBINE POWERED 8.95 DUMMY 3.95 BUDD RAIL DIESEL S.F., N.H., B. & O.
TYCO GP-20 9.88 READY TO-RUN DIESEL AT&SF, CB&Q, NYC, UP, RR.
VARNEY SW7 Switcher DIESEL READY-TO-RUN 12.95 NH, SP, B&O, PRR.
TYCO F-9 DIESEL 8.95 READY-TO-RUN ROADS: B&O, CP, ACL, C&O, D&RGW, SF, NH, CB&Q, PRR, CN.
R-T-R TYCO ALCO CENTURY 430 DIESEL 14.95 OPERATING HEADLIGHT. ROAD ROAD NAMES: GB&W, NH, SP & S. KIT WITH ABOVE ROAD NAMES 10.98
Athearn RP-25 Equipped 40' FOOT SPECIAL BOX CAR 1236 TOLEDO, PEORIA & WESTERN 1237 WESTERN PACIFIC 1238 FRISCO 1239 NEW HAVEN 1240 NAT'L CYL. GAS 1241 LINDE & AIR PROD. 1242 DEL. & HUDSON 1243 ERIE & LACK. 2.19 EACH Car Kits
50' FOOT AUTO BOX 1319 UP AUTOMATED RAILWAY 1320 FRISCO 1321 L & N DIXIELAND 2.39 EA.

Athearn NEW EMD SD-45 FREIGHT DIESEL LOCO READY-TO-RUN A NEW GENERATION DIESEL-POWER PLUS 12 WHEEL, GEARED DRIVE & A POWERFUL MOTOR. AN HO POWER-HOUSE. ROAD NAMES:-PENNA., S.P., U.P., S.F., C.B. &Q., S.AL. 14.95
Athearn SDP-40 NEW READY-TO-RUN PASSENGER DIESEL ROAD NAMES: B&O, C&NW, NH, NYC, SANTA FE, SP. 14.95
TYCO TRAIN SET READY- TO-RUN 5 UNIT F9 DIESEL FREIGHT TRAIN SET F9 'A' DIESEL, GONDOLA W/LOAD, REEFER, OPERATING HOPPER, 4 WHL. CABOOSE & TRACK FOR 36' CIRCLE. SALE 11.88 REG. $16.98
SET T6502A-EAST COAST EXP ROAD NAME:- PRR. SET T6502B-WEST COAST EXP. ROAD NAME:- SF.
R-T-R TYCO NEW PRAIRIE' 2-6-2 LOCO W/TENDER. OPERATING HEADLIGHT. ROAD NAMES:-SF, PRR. 21.95 KIT K234 NO ROAD NAMES 14.95
ROUNDHOUSE M.D.C. 50' PLUG DOOR BOX CAR: Deluxe KITS: SANTA FE, RAILWAY EXP, SO. PACIF. 3.10 EA.
UNDEC.: U.P., MILLER, WEST. PACIF., FRISCO, NKL. PLATE, COTTON BELT. 2.29 EA.
40' BOX CARS: PENN., GT. NORTH, SANTA FE, HORIZ. R1B BOX CAR: MILW. in OLYMPIAN or HIAWATHA C.N.& St.P. in OLYMP. or HIAW. 1.79 EACH
40' BOX CAR: LINDE, COOKIE BOX, GT. NORTH. 1.98 EACH
50' BOX CAR: UNION PAC. $3.95

Revell TRACK CLEANER CAR READY-TO-RUN REALLY KEEPS TRACK CLEAN! 4.95
HO LOCOS IMPORTED by PACIFIC FAST MAIL ALL BRASS-UNPAINTED ....READY-TO-RUN
FRISCO 2-10-0 49.50
U.P. 0-6-0 43.50
C & O 2-6-6-2 79.50
2 TRUCK SHAY 54.50
DMIR 0-10-2 69.50
OMAHA 0-6-0 37.50
USRA 2-8-2 49.50
CPR 2-8-0 49.50
PRR 2-8-2 49.50
ULRICH TRACK CLEANING CAR W/TRUCKS 3.45 KIT IT WORKS....FILL TANK WITH CLEANING SOLVENT CLEANS TRACK as CAR RUNS ON THE LAYOUT...

BARGAIN TYCO READY-TO-RUN GEAR DRIVE 2-8-2 MIKADO 16.95 EA. LOCO & TENDER KIT.....$11.25 Undecorated.
TYCO READY-TO-RUN CARS
BOX CARS STOCK CARS REEFER GONDOLA HOPPER SKID FLAT SALE 1.19 EACH — 1.25 EACH SALE
R-T-R ½ PRICE SALE OUR CHOICE OF ROADNAME
CHEMICAL TANK CARS COVERED HOPPER SALE 1.39 EACH
8-WHEEL CABOOSE 1.69 EACH
READY-TO-RUN HO CARS SALE 99¢ With N.M.R.A. Couplers Removed from leftover train sets. Brand New and 100% Guaranteed. Your Choice: Tank Car, Box Car, Cattle Car, Reefer, Gondola, or Cab'se. Our Choice of Road Names and Mfr.

ORDER NOW! Get all the AHC "EXTRAS"
Order-By-Mail AMERICA'S HOBBY CENTER, 146 C West 22nd St., New York, N.Y. 10011

AHC HAS 'EM ALL! ALMOST EVERYTHING IN "HO"

"AHC" IS THE PLACE TO BUY PARTS AND ACCESSORIES

• OVER 40,000 DIFFERENT MODEL BUILDER SUPPLIES IN STOCK RIGHT NOW

ORDER BY MAIL FROM AMERICA'S HOBBY CENTER, 146 C WEST 22nd. STREET, N.Y., N.Y. 10011

PARTS & ACCESSORIES

NO.201.... 35¢ — 2 PR. NMRA COUPLER LESS DRAFT
NO.202.... 49¢ — 2 PR. NMRA COUPLER WITH INTEGRAL SPRING
NO.203.... 39¢ — 1 Pr. Couplers with straight springs
NO.204.... 29¢ — 24 PCS. For all Loco's DRIVE BELT
NO.205.... 29¢ — 24 PCS. BRONZE COUPLER SPRING Universal type for all Couplers
NO.206.... 29¢ — 24 PCS. STEEL TRUCK SPRINGS For all HO Trucks
NO.207.... 39¢ — 36 PCS. BRASS RAIL JOINERS
NO.208.... 49¢ — 36 PCS. NICKLE SILVER RAIL JOINERS
NO.209.... 29¢ — 12 PCS. AMBER INSULATED RAIL JOINER
NO.210.... 39¢ — 12 PCS. TERMINAL TRACK CONNECTOR
NO.211.... 49¢ — 1 CIRCUIT BREAKER ONLY
NO.212.... 29¢ — 10 FT. MOTOR FLEX WIRE
NO.213.... 29¢ — 12 PCS. ASST. MACHINE SCREWS
NO.214.... 29¢ — 12 PCS. ASST. MACHINE NUTS
NO. 215... 59¢ — Needle Point Smoke Fluid.
NO.216.... 29¢ — 48 PCS. #4-3/16 INSULATING FIBRE WASHER
NO.217.... 29¢ — 48 PCS. BRASS WASHERS #4 x 3/16
NO.218.... 29¢ — 12 ASST. SOLDERLESS TERMINAL LUGS
NO.219.... 39¢ — 4 3-48 x 5/32 10 SETS REPLACEMENT SCREWS NUTS ATLAS
NO.220.... 49¢ — 750 HO ROUNDHEAD TRACK SPIKES
NO.222.... 29¢ — 12 PCS. 0 x 5/16 SELF TAP SCREWS
NO.223.... 59¢ — 1 PR. H.O. SPRUNG FREIGHT TRUCKS
NO.221.... 29¢ — 12 PCS. 0 x 5/32 SELF TAP SCREWS
NO.224.... 29¢ — 4 STRIPS ASST. EMERY-PAPER
NO.225.... 49¢ — 3 SETS EXTENSION SET ATLAS SWITCHES
NO.226.... 49¢ — 2000 H.O. OFFSET SPIKES
NO.227.... 49¢ — 3 SETS THROWBAR SET ATLAS SWITCHES
NO.228.... 29¢ — 12 PCS. ELECTRIC WIRE NUT CONNECTOR
NO.231.... 69¢ — 1 COMPLETE SET CIRCUIT BREAKERS

NO.236.... 29¢ — 2 x 3/8 24 PCS. 0 & .027 TRACK MOUNTING SCREWS
NO.237 29¢ — 15 PCS. BRASS MOUNTING SCREWS ATLAS ELECTRICAL ITEMS
NO.238.... 29¢ — 256 x 5/16 12 PCS. SELF TAP TRUCK SCREWS
NO.239.... 29¢ — 3 x 1/2 24 PCS. For O & SUPER O TRACK MOUNTING SCREWS
NO.241.... 29¢ — 6 FT. ROSINCORE MATCH SOLDER
NO.242....35¢ — TRACK CLEANER BLOCK
NO.243.... 49¢ — SCREWDRIVER SET WITH 3 BLADES
NO.244... 39¢ — SET (2 PC.) REGULAR & RECESSED SCREWDRIVER
NO.245.... 49¢ — 500 PCS. H.O. & S ROUNDHEAD TRACK N' CORK SPIKES
NO.631 PIGTAIL LITE KIT 25¢ — MIN. BULB TO LITE ACCESSORIES, BULB REPLACEMENT..20¢

920 FARM ACCES. 50¢ — 921 STATION ACCES. 50¢ — 922 ROOF SUPPORT 50¢ — 923 STATION WINDOW & PHONE BOX 50¢
924 TRACK NAILS 50¢ — 925 GRAB IRONS 50¢ — 926 3/8" MODEL PINS 50¢ — 927 WATCHMANS SHANTY 50¢
928 BAGGAGE TRUCK W/LOAD 50¢ — 929 TRACKMANS ACCES. 50¢ — 930 SCALE CHAIN 50¢ — 931 ASST. BRAKE WHEELS 50¢
932 NMRA COUPLER PR. 50¢ — 933 WOOD DOWEL ASST. 50¢ — 934 1/32" WOOD STRIPS 50¢ — 935 1/16" WOOD STRIPS 50¢
936 ASST. WOOD SCREWS 50¢ — 937 1/4" NAILS 50¢ — 938 1/4" BRADS 50¢ — 939 3/8" NAILS 50¢
940 ASST. ELEC. PARTS 50¢ — 941 ASST. WASHERS 50¢ — 942 PLASTIC WINDOWS 50¢ — BLOCK OR CROSS SIGNAL 4/49¢

PERFECT

RAILROAD ACCESSORIES
Snap-On Track Cleaner — 35c
HO Track Connector — 35c
House Lighting Kit — 50c
Needle Point Grease Gun — 60c
Mechanical Fingers — 90c
Needle Point Oiler — 60c
NMRA Couplers w/ Draft Gear (2) — 35c
Mounting Screws & Nuts (6 ea.) — 15c
NMRA Couplers w. Int. Spring — 20c
Sprung Freight Trucks (pr.) — 50c
NMRA Coupler Springs (6) — 15c
HO Truck Springs (12) — 15c
Track Cleaner — 30c
NMRA Uncoupling Ramp — 50c
Screw Driver Set — Jewelers — 50c
Abrasive Sheets (6 ass'd.) — 25c
Connector Cord Set (3 ft.) — 35c
Terminal Lugs (solderless) — 15c
Wire Connector Nuts (6) — 15c
Match Solder (2 ft.) — 25c
Tiny Screw Driver Set — 35c
Mounting Wood Screws (14 assrtd.) — 20c
Hook-Up Wire (6 ft.) — 25c
NMRA Couplers w/ Spring (2) — 25c
Rail Joiners — Insulated (12) — 15c
Machine Screws 2-56 (12 assrtd.) — 20c
Machine Screw Nuts (12 assrtd.) — 20c
Washers — #4 (18 asstd.) — 15c
HO Rail Spikes (1,000) — 35c
Track & Cork Spikes (250) — 20c
Red Grain of Wheat Bulbs (2) — 30c
Round Head Track Spikes (750) — 35c
Pea Bulb — Screw Base — 12-15 V. — 20c
Truck Screws (self-tap 2 x 1/4") (6) — 15c
Neoprene Belt Drives (12 assrtd.) — 15c
Clear Grain of Wheat Bulbs (2) — 30c
Green Grain of Wheat Bulbs (2) — 30c
White Pea Bulb — 12-15 V. — 15c
Rail Joiners — Brass (12) — 15c
Slide Switch — SPST — 30c
Self-Closing Forceps — 30c

AHC HAS THE WORLD'S LARGEST STOCK OF "HO"

MODEL HOBBIES

SCRATCHBUILDER SUPPLIES

902 CAST DOOR ASST. 50¢ — 903 CHIMNEY ASST. 50¢ — 904 PLATFORM ACCES. 50¢ — 905 PLATFORM TRUCK 50¢
907 8"x10" CELLULOID 25¢ — 908 ASST. WOOD $2.50 — 909 LARGE ASST. $2.50 — 910 LARGE WINDOW SET 50¢
911 MEDIUM WINDOW SET 50¢ — 912 SMALL WINDOW SET 50¢ — 913 SIGN ASST. 50¢ — 914 WOOD DOOR ASST. 50¢
916 HINGE SET 50¢ — 917 WOOD OUTHOUSE 50¢ — 918 WOOD BOLSTER 50¢ — 919 FARM ANIMALS 50¢

TRACK SPIKERS — NEW HI SPEED TRACK LAYER 125 — GAUNT SPIKER 75¢
METAL TRACK GAUGES — WALTHERS.. .35, TROXEL.... .85, N.E.W. .... .35, VARNEY.... .30
SPIKES — VARNEY OFFSET HEAD 4LB. .50, PERFECT SQUARE OFFSET .20, UPC #1/3 SQUARE SHANK(2000) .49, UPC #126 ROUND HEAD (750) .49
RE-RAILERS — ATLAS.... .60, VARNEY.... .39, PENN LINE. .50, TYCO..... .49

TYCO — #101 BLVD. STREET LAMPS 98¢ — LIGHTING KIT 49¢
ATLAS STATION PLATFORMS 98¢ KIT — ATLAS RESTAURANT KIT 2.98

AHC HAS ALMOST EVERYTHING

WE STOCK OVER 40,000 DIFFERENT MODEL BUILDER SUPPLIES • FAMOUS BRANDS

MODEL RAILROAD FANS ! TRY 'AHC' FIRST FOR THE SMALL PARTS & ACCESSORIES YOU WANT ! WE CARRY A FANTASTICALLY LARGE HO PARTS INVENTORY...IN STOCK THE ENTIRE YEAR ! SEND US YOUR ORDER 99 CHANCES OUT OF 100 WE CAN SHIP WHAT YOU WANT IMMEDIATELY !

CLIFF LINE SINGLE TUNNEL PORTAL 95¢
JEWEL MARKER LIGHTS 60¢ EA. — HX900 2 RED 3 GREEN; HX902 2 RED 2 GREEN; HX901 1 RED 3 AMBER; HX903 2 RED 2 AMBER
CHAIN LINK FENCE — 6 FT. HIGH $1.95; 12 FT. HIGH $2.95
TELEPHONE POLES — BACHMANN DOZEN.. .45; REVELL DOZEN.. .49; ATLAS DOZEN.. .49

LANDSCAPING

COAL, BALLAST GRAVEL, BLACK STONE, RED OR GRAY STONE.. 29¢ EACH
BALLAST CEMENT PINT 59¢ — FOR CEMENTING SCENIC MATERIAL TO LANDSCAPES..
LICHEN MOSS — EACH 98¢ — H604 GREEN, H605 AUTUMN
GRASS 59¢ — JUMBO BOX REALISTIC IMITATION
MAK-A-MOUNTAIN COMPOUND $1.00
SPRAY CANS 100 EACH — EARTH, GRASS, SAND, BALLAST OR ADHESIVE.
PERMA-SCENE — COMPOUND MAKES REAL TERRAIN 8 SQ. FT. PACKAGE 100, 20 SQ. FT. PACKAGE 200
COMPLETE SCENIC TERRAIN KIT WITH SCREEN 3.49
TREES — PACKAGE OF SIX 98¢ — SHADE TREES, FRUIT TREES, PINE TREES, SPRING TREES, ASSORTED TREES, EVERGREEN TREES, AUTUMN TREES, ORANGE TREES, APPLE TREES

OPERATING ELECTRIC SIGNS — SEMAPHORE INDUSTRIES
SM1610 VALLEY LUMBER CO. 1.95
SM1611 KAY'S CAFE.... 1.95
SM1612 ACME MFG.CO.... 1.95
SM1613 GENERAL STORE.... 1.95

BLDG. PAPERS

WALTHERS 25¢ PER PACKAGE 6"x9" SHEETS. EACH PACKAGE CONTAINS 4 SHEETS
V168 DOORS & WINDOWS, WHITE....
V160 CONCRETE BLOCKS, GRAY....
V163 FIELDSTONE....
V166W CLAPBOARD SIDING, WHITE..
V166G CLAPBOARD SIDING, GREEN..
V165Y CLAPBOARD SIDING, YELLOW..
V166R CLAPBOARD SIDING, RED....
V167 RED BRICK (2 COLOR)....
V169 FLAGSTONE & PATIO, GRAY..
V172 SLATE SHINGLE, GRAY....
V173 WOOD SHINGLES, GREEN....
V174 WOOD SHINGLES, RED....
V175 WOOD SHINGLES, BROWN....
V176 WOOD SHINGLES, GRAY....
V161 ASHLAR STONE BLOCKS, YEL.
V162 BRICK, YELLOW....
V162G BRICK, GRAY OR SMOKEY....
V164 ASHLAR STONE, RANDOM....
V483 ASPHALT SHINGLES, GRAY....
V484 ASPHALT SHINGLES, RED....
V485 ASPHALT SHINGLES, BROWN..
V486 ASPHALT SHINGLES, GRAY....
V508W BATTEN SIDING, WHITE....
V508G BATTEN SIDING, GRAY....
V508R BATTEN SIDING, RED....
V179 SAMPLER (12 SHEETS, OUR CHOICE.....60

CELLULOID 4"x7" SHEETS
V506 RESIDENTIAL WINDOWS.. .25
V340 INDUSTRIAL WINDOWS.... .25
V502 UNPRINTED WINDOWS.... .25

PREFORM GRAB IRONS 144/ $1 — BRASS HAND RAILS 12/ 40¢ — VALVE GEAR RIVETS 12/ 35¢ — METAL BELLS 6/ 25¢
1743 TRU SCALE BUMPER — PLAIN..... .59, ILLUMINATED .98
MHP DIAPHRAGHMS — STANDARD.... .75, STREAMLINE.. .85

PAINTS

Floquil — EACH 1 OZ. JARS 60¢ — FLAT BLACK, ROOF BROWN, EARTH, CONCRETE, FLESH, GRAY, DIES, DARK-GREEN, DIES, LIGHT GREEN, PULLMAN GREEN, COACH GREEN, DIES, APPLE, REEFER ORANGE, PRIMER, BOOSE RED, BOX CAR RED, REEFER YELLOW, TUSCAN RED, REEFER WHITE, BRASS, CLEAR GLOSS, CLEAR GLAZE, DEPOT-OLIVE, VARNISH, GOLD, JADE GREEN, COPPER, TRIM GREEN, FOUNDATION. THINNER AND MANY OTHER COLORS.
WEATHERING KIT KIT CONTAINS: GRIMY, BLACK, DUST, GRIME, RUST, MUD, & DIO-SOL THINNER. 1.98

BLDGS. & STRUCTURES

TYCO #104 YARD SPOTLIGHT TOWER 149 EACH — #106 2 LIGHT FLOODLIGHT TOWER
TYCO #105 BLINKING MICROWAVE TOWER 149 EACH — #107 4 LIGHT FLOODLIGHT TOWER

FIGURES

WESTON MINI-FIGURE CO. SUPER DETAILED, HAND PAINTED FIGURES & ACCESSORIES 65¢ EACH
200 ENGINEER.....
201 FIREMAN.....
202 RED CAP & LUGGAGE
203 RED CAP.....
204A STATION MASTER....
204B PASS.BRAKEMAN....
204C PASS.CONDUCTOR....
205 FREIGHT BRAKEMAN-HANDS ON LADDER....
206 FREIGHT CONDUCTOR BAGGAGE MAN GR STREET CAR MOTORMAN
207 FREIGHT BRAKEMAN.
208 DINING CAR WAITER.
209 PULLMAN PORTER..
212 HOBO, RECLING....
215 LOAFER.....
217 MRS.SPUMONI.....
223 WALKING WOMAN....
224 MAN SEATED.....
228 OLD MAN WALKING....
229 YOUNG MAN WALKING.
230A SWEATER GIRL, RED-HEAD.....
230B SWEATER GIRL, BLONDE
231 FLEXIBLE FREDDY.
233 THE THINKER.....
234 OLD TIMER.....
235 KIBITZER.....
237 ENGINEER 1890....
238 MAN 1890.....
239 COP 1890.....
240 LADY 1890.....
241 TELEGRAPHER.....
242A BLACKSMITH ONLY...
245 SHERIFF.....
246 DRUNK.....
247 HALLMAN.....
248 STREET SWEEPER..
249 TELEPHONE LINEMAN.

ACCESSORIES

WESTON
211B HOBO SEATED, WITH STICK AND BUNDLE.
213 HOBO, WALKING....
275 SECTION HAND WITH SHOVEL.....
227 SECTION HAND WITH PICK....75¢ EACH
100 SIX ILLUM.LAMP POST.. 1.00
102 HAND CAR..... 1.50
102-216 HAND CAR & RIDER. 2.00
103 POT BELLIED STOVE.... .25
104 CHAIR..... .25
105 WHEELBARROW..... .30
108 SECTION TOOLS (6)..... .60
109 RESTAURANT SET, GARBAGE CAN CASH REG. & COFFEE URN .30
119 HAND TRUCK..... .30
120 LAWN MOWER..... .30
121 SAW HORSE (2)..... .30
122 STEP LADDER..... .35
123-124 HAMMER & SAW.... .25
125 ACCESSORIES SET #119 THROUGH 124!..... 1.35

WESTON FIGURES
126 HOME MADE CHAIR..... .25
127 BOXES (SET OF 2)..... .30
128 CHECKER BOARD..... .30
129 ANVIL..... .25
132 SWEEPERS CART..... .30
210 LADY IN THE LAKE.... .60
210A LADY'S CLOTHES..... .30
211A SEATED HOBO WITH STICK, CAN AND FIRE..... .85
211B SEATED HOBO WITH STICK, AND BUNDLE..... .75
216 COMPLETE HOBO SET, THREE FIGURES & ACCESSORIES. 2.25
216 HAND CAR RIDER..... .60
218 PISTACHIO(SPUMONI JR) .50
219 MRS.SPUMONI, PISTACHIO & THE FAMILY WASH..... 2.65
220 OLD MAN ASLEEP..... .60
221 ASSORTMENT OF SIX FREIGHT TRAIN FIGURES..... 3.90
222 ASSORTMENT OF SIX PASSENGER TRAIN FIGURES..... 3.85
226-105 SECTION HAND WITH WHEELBARROW..... .90
236 CHECKER PLAYERS, SET OF 3 FIGURES, 2 BOXES, HOME MADE CHAIR, SLEEPING DOG, AND CHECKER BOARD..... 3.00
242 BLACKSMITH WITH ANVIL AND HAMMER..... .95
243 COMPLETE SET OF OLD TIME FIGURES, G FIGURES, ANVIL & HAMMER..... 4.00
248-132 SWEEPER & CART... .85
ANIMALS
400 DOG SCRATCHING..... .25
401 PIGEONS SET OF 6..... .60
402 COLLIE..... .25
403 DOG SLEEPING..... .25

MEW MODEL ENGINEERING WORKS

UNIQUE MINIATURES IN HO SCALE
SWITCH STANDS
S1 HI-LEVEL SWITCH STAND.$.90
S2 GROUND THROW SW.STAND...75
S30 HARP SWITCH STAND KIT...59
S31 HARP SW.STAND FINISHED..90
RAMAPO SWITCH STANDS
502 HIGH FOR MAN. SWITCHES..9F
503 HIGH FOR ELECT.SWITCHES.75
504 LOW FOR MAN.SWITCHES...98
505 LOW FOR ELECT.SWITCHES..75
STAR SWITCH STANDS
509 HIGH FOR MAN.SWITCHES...98
510 HIGH FOR ELECT.SWITCHES.75

MINE ACCESSORIES
800 CALICO MINE SET.....$1.89 (MINER, CAR, PICK, SHOVEL, 2PCS. STRAIGHT TRACK)
801 MINE CAR ONLY.....89
802 MINE TRACK STRAIGHT.....35
803 CURVED TRACK, 2" RADIUS.35
804 KICK SWITCHES, PAIR.....50
805 TIMBER CAR.....89
809 "MIKE" THE MINER.....65
810 PROSPECTOR 'PETE 75

IRON HORSE MINIATURES
500 RAILWAY MAIL CRANE...$1.25
501 DERAIL SET.....$1.25
506 MARKER LAMP SET GGR....75
507 EXTRA MARKER BKTS.....25
508 MARKER LAMP SET YYR....75
511 HAYES BUMPER.....59
512 "AB" UNDERBODY SET....98
513 "K" UNDERBODY SET.....98

COUPLERS & TRUCKS

COUPLERS — KADEE MKD 5&10 MAGNETIC DELAY ACTION WITH DRAFT GEAR 2 PR. 1.20
UNCOUPLING RAMP FOR ABOVE .98
RAIL LINE NMRA
W/DRAFT GEAR INTEGRAL SPG. .50
L/DRAFT GEAR, INTEGRAL SPG. .35

RP-25 TRUCKS
BETTENDORF — ATHEARN.. .95, C.VALLEY. 1.25, CLIFF LINE .95, LINDBERG.. .69
ARCH BAR — C.VALLEY. 1.25, M.D.C. .. .75, M.E.W. 1.25, KADEE.... .75
PASSENGER — 4 WHEEL: C.VALLEY. 2.45, WALTHERS. 1.25, CLIFF LINE 1.69; 6 WHEEL: C.VALLEY. 2.95, M.D.C. .. 1.10

SIGNAL BRIDGE

SILVINE "HO" SIGNAL BRIDGE S-61
ALL METAL WITH OPERATING LIGHTS. 2 SETS OF RED AND GREEN TARGET SIGNALS.. 12 VOLT REPLACEABLE BULBS.. DETAILED GIRDER CONSTRUCTION. REG. 5.98 READY-TO-USE 3.79

SUYDAM HO BUILDINGS & KITS ACCESSORIES

#522 NEW DIESEL HOUSE....4.95
#87 MAIL POUCH TOBACCO BARN.....1.95
#1 FURNITURE FACTORY.....4.25
#7 WAREHOUSE.....4.25
#12 NORTHWESTERN TYPE GRAIN ELEVATOR.....4.25
#16 INDUSTRIAL OFFICES....1.95
#352 MINE HEAD FRAME.....3.95
#353 L.C.L. FREIGHT STA....2.95
#354 TIMBER OIL DERRICK...5.95
#751 TIMBER TRESTLE.....3.75
#751 DECK TIMBER BRIDGE...3.30
#752 THRU TIMBER BRIDGE...3.30
#796 1000 PROFILE TIES....1.95
#797 250 PROFILE TIES.....1.95
#798 500 PROFILE BR.TIES. 1.95
#799 100 PROFILE NARROW GAUGE TIES.....1.95
#351 TIMBER TUNNEL PORTAL.1.75
#250 WOODEN BARRELS 12 FOR .49
#251 OIL DRUMS 12 FOR .....
#201 EARLY DAY FLAT CAR...3.40
#202 EARLY DAY GONDOLA....3.50
#785 FREIGHT PLATFORMS....1.25
#786 PASSENGER PLATFORMS...95
#761 CATTLE LOADING PENS...1.35
#763 SINGLE TRACK TRUSS BRIDGE.....3.60
#764 DOUBLE TRACK TRUSS BRIDGE.....5.65
#765 DECK PLATE GIRDER BRIDGE.....2.95
#766 THRU PLATE GIRDER BRIDGE.....3.30
#301 OPEN DECK PILE TRESTLE 1.75
#11 SAWMILL W/INTERIOR AND EXTERIOR DETAILS....$5.25
#15 BARTON FLATS LUMBER CO. 5.75
#14 (BLDG.ONLY).....4.25
#19 PACIFIC FOUNDRY.....2.95
#18 MINING CO. MILL.....2.50
#456 COMPLETE MINING INDUSTRY PACKAGE.....16.50
#24 WYOMING CHAPEL.....5.95
#8 3 STALL ROUNDHOUSE....5.75
#8X EXTRA STALLS (EACH)...1.25
#9 2 STALL ENGINEHOUSE....4.25
#10 YARD CONTROL TOWER....4.50
#73 MAIN STREET STATION...4.25
#71 YOUR HOBBY SHOP.....2.75
#72 FOLLIES THEATER W/LIGHTING 4.95
#75 TRIANGLE CAFE W/INTERIOR 4.25
#81 GRAND JUNCTION BOX WORKS 3.25
#82 PURINA CHOWS FEED MILL3.95
#83 SUNKIST EXCHANGE.....3.25
#85 SWIFT MEAT PACKING PLANT 3.95
#541 MODERN FACTORY.....2.25
#542 RAIL-TRUCK TERMINAL..2.25
#543 MODERN INDUSTRY.....2.25
#566 UNION ICE CO.....4.25
#571 OLD TOWN.....5.25
#572 OLD TOWN LODGINGS....4.25
#504 STANDARD STATION.....2.95
#502 PASSENGER DEPOT.....4.25
#511 FREIGHT HOUSE.....2.95
#536 WATER TANK.....2.25
#500 SPECIAL PACKAGE OF OLD TIME STATIONS.....
#514 BOX CAR FREIGHT HOUSE1.95
#573 OLD TOWN BUSINESS BLOCK 95
#574 OLD TOWN HOMES.....3.95
#86 WELLS FARGO EXP. STA. 2.25
#23 AMER. CHEM. & POTASH CO. ANNEX.....6.75
#62 2 WAYSIDE SHELTERS.....95
#63 WAYSIDE SHELTERS.....95
#64 PASS. STA. COMPO.ROOF 2.95
#65 PASS.STA.SHEDCORRUG.. 2.95
#20 3 TRACK CAR BARN.....4.25
#21 2 TRACK CAR BARN.....3.95
#21D 4 TRACK CAR BARN....6.50
#61 INTERLOCKING TOWER & SHED.....2.50
#4 BUCKHORN MINING CO'S ORE PROCESSING PLANT.....5.75
#5 BLACK BART MINE.....2.25
#6 RED LAKE GAS BARN.....2.75
#17 MINING HOIST HOUSE 2.25

SEE OUR ORDER BLANK ON NEXT PAGE

EVERY DAY IS SAVINGS DAY AT AMERICA'S HOBBY CENTER — Order-By-Mail From AMERICA'S HOBBY CENTER, 146 C West 22nd St., New York, N.Y., 10011

E-L Inspection Special

Your May issue hinted of a merger between the Erie-Lackawanna and the Norfolk & Western, Wabash, and and C&O. As a true E-L buff I must inform you that the train in question was merely an inspection train. I was at the local station on the day that a superintendent's circular was received to that effect.

John Snoggins
Erie-Lackawanna RR Club
629 Franklin Ave.
Nutley 10, N. J.

In late March this same train was also in Scranton, Pa. I was told the reason for the special running over the Lackawanna was to check the possibility of running N&W coal trains on the E-L from Phillipsburg, N. J. to the New York Terminal area. The N&W would probably run these trains to Hagerstown, Md., and then turn them over to the Reading for interchange with the Jersey Central to Phillipsburg.

The consist was as follows when the special arrived in Scranton:

E-L E-8 engs. 821 and 819
E-L private car No. 2, grey & maroon
E-L private car No. 3, grey & maroon
N&W private car No. 15, Wabash blue
SP Pullman No. 9046, silver, red stripe
Wabash cafe-lounge car No. 1568, blue
C&O inspection car No. RI-2, blue & yellow

The same night that this special arrived in Scranton, the two E-L private cars went west to Cleveland in the consist of No. 5, "The Lake Cities". The following morning, the special left Scranton for Albany, N. Y., over the Delaware & Hudson, with D&H private car No. 300 in the consist and two Alco RS type roadswitchers on the head end.

Perry L. Billington
Scranton, Pa.

The E-L, D&H, and B&M have been rumored linked in merger talks into the N&W-C&O. Wabash and Nickel Plate already have been merged into N&W. Ed.

Subway Cars Wanted

I am 17 years old and a Lionel operator. I'm bothered that no manufacturer has come out with O gauge subway cars or el cars of Chicago, New York, Boston, etc . . I've made some cars out of scratch materials, complete with sliding doors. Work cars are also needed. And maybe a Pennsy E-44 and some Silverliners.

William Thomas III
5131 Folsom St.
Philadelphia, Pa. 19139

Limited interest in subway cars makes it unlikely that a manufacturer such as Lionel would risk the cost of tooling up for questionable

SPECIAL MAIL-ORDER VALUES FOR "HO" MODEL RAILROADERS
AHC
Order-By-Mail From America's HOBBY CENTER, 146 West 22nd St., New York, N.Y. 10011

TRACKSIDE BUILDINGS
ATLAS KITS DETAILED HO SCALE PLASTIC BUILDINGS.
757 LUMBER & SAW MILL $2.98
#731 CHAPEL ON THE HILL $1.29
#732 TWIN LOG CABINS $1.29
KITS
#732 TWIN LOG CABINS $1.29
#771 14 STORY OFFICE BLDG. $4.98
728 SUMMER COTTAGE. 1.29
729 4 GREEN HOUSES. 1.29
730 FLAG STOP STN. 1.29
737 RANCH HOUSE.... 1.49
738 SPLIT LEVEL.... 1.49
739 2 HOUSES UNDER CONSTRUCTION... 1.49
740 SHELL GAS STATN 1.49
701 GATE TOWER... .69
702 TRACK SHANTY. .69
703 WATER TOWER. 1.49
704 SIGNAL TOWER 1.49
705 TEL.SHANTY & POLE..... .49
706 PASS.STATION 1.98
707 STA.PLAT.SET. .98
714 WAREHOUSE SNL .98
715 COCA COLA STD .98
716 STONE DWELLING.98
717 BOAT HOUSE.... .98
718 BARN/CORN CRIB.98
719 RURAL BARN.... .98
720 RANGER STATION.98
726 LUMBER SHED. 1.29
727 BARN & SHED. 1.29
749 FREIGHT STATION 1.98
750 LUMBER YARD & OFFICE BUILDING 1.98
751 MODERN HOME.... 2.49
759 WATERMILL..... 2.98
759P WATERMILL PUMP 2.98
760 ROADSIDE RESTAURANT..... 2.98
775 12 TELEPHONE POLES..... .49
776 FENCE & GATE.... .69

Revell BUILDINGS
SMALL TOWN STATION T-9001 1.98 KITS
OPERATING ENGINE HOUSE #T-9028 2.98
FREIGHT STATION #T-9020 1.49
FARMHOUSE SET 8 PC. SET #T-9003 1.98
SUPERIOR BAKERY #T-9037 2.98
TRACKSIDE BLDGS. #T-9002 5 PC.SET 1.98
BARNYARD SET #T-9015 9 PC.SET 1.98

SUYDAM HO BLDGS. & STRUCTURES
BLACK BART MINE 2.25 KITS
METAL KIT
*WE PAY POSTAGE ON ORDERS OVER $3.00
11 SAWMILL W/DETAIL..5.25
15 BARTON FLATS LUMBER CO..... 5.75
14 WATER HEATER CO. 4.25
19 PACIFIC FOUNDRY.. 2.95
18 MINING CO.MILL... 2.50
456 COMPLETE MINING INDUSTRY PKG.. 16.50
24 WYOMING COAL MINE 6.95
8 3 STALL ROUNDHSE 5.75
8X EXTRA STALLS EACH 1.25
9 2 STALL ENGINEHSE 4.25
80 YARD CONTROL TOWER4.50
73 MAIN ST. STATION. 4.25
71 YOUR HOBBY SHOP.. 2.75
72 FOLLIES THEATRE.. 4.95 WITH LIGHTING.
75 TRIANGLE CAFE W/INT 4.25
81 GRAND JUNCTION BOX WORKS..... 3.25
82 PURINA CHOWS FEED MILL 3.95
83 SUNKIST CITRUS 3.25
85 SWIFT MEAT PKG.PLT3.95
541 MODERN FACTORY 2.25
542 RAIL.TRUCK TERM 2.25
543 MODERN INDUSTRY. 2.25
566 UNION ICE CO.... 4.25
571 OLD TOWN..... 5.25
572 OLD TOWN LODGING 4.25
502 1887 PASS.DEPOT. 4.25
511 1886 FREIGHT HSE 2.95
536 1870 WATER TANK. 2.25
514 BOX CAR FREIGHT HOUSE..... 1.95
573 OLD TOWN BUSINESS BLOCK..... 4.95
574 OLD TOWN HOMES.. 3.95
522 NEW DIESEL HOUSE 4.95
86 WELLS FARGO EXP. STATION..... 2.25
87 MAIL POUCH TOBACCO BARN..... 1 95
23 AKER.CHEM.& POTASH COMPANY ANNEX... 6.75

AHC CORK ROADBED 25 for $5.99 NATURAL COLOR 25¢ EA
FLEXIBLE..EASILY CURVED TO MATCH YOUR TRACK LAYOUT...
AHC CORK SWITCH BLOCKS #4 or #6 25¢ EA
3 WAY SWITCH 4.95
BRASS RAIL... ON REALISTIC TIE STRIP.. FULLY INSULATED
NICKEL SILVER...$5.95
DOUBLE CROSSOVER
BRASS..... $7.95
NKL.SILVER.$9.95
"HO" Switches 1.25 EA.
OUR OWN AMTRON BRAND. ASSEMBLED #4 or #6 RH or LH BRASS
NICKEL SILVER 1.95 EA.
SALE • HO TRACK SPECIALS
3 FT. FLEXIBLE TRACK 49¢ MINIMUM OF 5 PIECES
Our own "Amtron" brand. Made to our own & NMRA specifications. Solid brass "T" rail on heavy fiber tie strip. Nckl Silver 69c (Brass) 25 for $10.00
Atlas Track -3 Ft. -75c

HO FIGURES
29¢ #81 SET OF 3 METAL FIGURES, FIREMAN BRAKEMAN AND ENGINEER
98¢ SET OF 48 PLASTIC PEOPLE & PASSENGERS
PEA LAMPS . . . 12 volt with leads. Choice of Red, Green, Amber or White 5 for 49¢
64 PAGE 25¢ MINI-BOOKS
WRITTEN BY: PAUL MALLORY
R1 BASIC ELECTRICAL BOOK
R2 TRACK & LAYOUT WIRING
R3 POWER SUPPLY/ACCES.WRNG.
R4 ELECTRICAL DATA BOOK
R5 GUIDE TO MODEL RAILROAD
R6 GET MORE OUT OF-MODEL RAILROADING
R7 HOW TO BUILD-YOUR OWN RAILROAD
BOOKS for model rails
NEW!! ATLAS CUSTOM LINE KING SIZE PLAN BOOK, by: John H.Armstrong & Thad Stepek.MEASURES:11"x 17" INFORMATION ON MAKING A VARIETY OF LAYOUTS, PLUS LISTINGS OF MATERIALS NEEDED, 3.00
ATLAS
LAYOUT BOOK..... 1.00
WIRING YOUR LAYOUT. 1.00
6 HO RAILROADS..... 1.00
SNAP TRACK LAYOUT.. .25
KALMBACH
HO PRIMER..... 2.00
HOW TO WIRE YOUR R.R. ... 2.00
SCENERY FOR MODEL R.R. .. 2.00
SMALL R.R.YOU CAN BUILD.. 1.00
101 TRACK PLANS..... 2.00
PRATICAL GUIDE TO MODEL RR 2.00
MODEL CARS & LOCOS..... 1.00
MODEL RAILROAD STRUCTURES 1.00
HO RAILROAD THAT GROWS... 1.00
TRACK PLANS/SECT'NL TRACK 1.00
TRACK PLANNING FOR REALISM 2.50
RAIL CRAFT
TRACK DESIGN..... 2.00
HO CUTOUT CITY..... 1.29
ROLLING STOCK PLAN BOOK.. 2.00
HO CUTOUT CITY
CARDBOARD CUTOUTS IN COLOR! SALE 98¢ REG. $1.29
RAILROAD MODEL CRAFTSMAN'S CUTOUT BOOK HAS FULL COLOR CUTOUTS FOR MAKING A COMPLETE HO CITY,WITH CAR LOT, STORES,POWERHOUSE,SERVICE-STATION,TRUCK & RAIL TERMINAL,HOUSES,HWY.SIGNS,ETC. PRINTED ON HEAVY CARDBOARD

HO RAIL Code 100
99 Ft. Bundle Brass 2.98 Nkl. Sil. 4.79
HO TIE STRIPS.
Track Tie Strip—25 Ft. 1.50
Switch Tie Strip—10 Ft. 2.00
Double Tie Strip—10 Ft. 2.50
GIRDER BRIDGE SALE! Assembled Bridge, complete with built-in Snap-Track 98¢
PRECISION SCREWDRIVERS 98¢ SET OF 5 IMPORTED
NOS. 1-2-3-4-5
5 PIECE PRECISION SCREWDRIVER SET A MUST FOR EVERY HOBBYIST
SNAP TRACK STRAIGHT 3",6",9" RADIUS 15,18,22" 19¢ Each
PLEASE SPECIFY TERMINAL or RERAILER TRACK 49¢ EACH
PASSENGER CARS NEW
R-T-R Roadnames: S.F. & P.R.R.
STANDARD PULLMAN OR COMBINE 3.50 EACH
DeLUXE COMBINE, DINER OR PULLMAN 6.98 EACH
OBSERVATION 3.98 EACH READY-TO-RUN
OBSERVATION 7.98 EACH

HO TRUCKS
AAR Bettendorf Sprung Freight Trucks ALL METAL
50¢ PR. Nylon Tks. 3 Pr. $1.00
SCINTILLA SALE POWERHOUSE REG. $8.95 AMP POWERPACK 4.95
OFFICIAL NMRA STANDARD HO GAUGE FOR CHECKING
* COUPLER HEIGHT
* FLANGEWAYS
* WHEELS
* TRACK
1.00
HO HANDCAR 12 Pc. KIT METAL 50¢
HO GAUGE.JUST THE THING TO GO WITH YOUR SECTION GANG LAYOUT..

BRUSH DEAL
24 for 1.00 SALE PRICED!
24 ASSORTED CAMEL HAIR BRUSHES. Nos. 1 TO 6..
TWEEZER SET 6 Pc. #730 98¢ ASSORTED SIZES AND SHAPES
HOBBYIST FILES 98¢ SIX MOST POPULAR SHAPES
DECAL BARGAIN 99¢
GRAB BAG ASSORTMENT. CONTAINS: 6 COMPLETE STEAM LOCO SETS WITH HERALDS, ROAD NAMES, NUMBERS, ETC.. MULTI COLORED DECAL SHEETS
"Thor" Switch MACHINE 1.49
6-24 volt AC-DC. Finest quality — for above or below train board mounting.
REMOTE CONTROL IMPORTED SWITCHES ASSEMBLED 3.95 pr. MANUAL SWITCH 5.95 pair

Wholesale WE SELL TO DEALERS
BENEFIT FROM OUR HUGE INVENTORY-IN-DEPTH.DO MORE PROFITABLE BUSINESS BY USING OUR 9 POINT SERVICE PROGRAM.WE DELIVER ANYWHERE IN THE WORLD...SEND US $1.00 FOR COMPLETE SET OF DEALERS 128 PAGE CATALOGS...YOUR PROFITS ARE OUR BUSINESS..
MOD-AD AGENCY, INC.
146 W.22nd ST., N.Y., N.Y., 10011
CATALOGS & BULLETINS
25¢ HO MODEL RAILROAD CATALOG. 128 PAGES.PICTURES AND DESCRIBES THOUSANDS OF MODEL RAILROAD CARS, LOCOS & ACCESSORIES.THE MOST COMPLETE HO REFERENCE GUIDE AVAILABLE...
MODEL AIRPLANE 160 Pg. 50¢
PLASTIC MODEL DISPLAY 25¢
SLOT RACING & PARTS 25¢
AV AIRPLANE BULLETIN 5¢
RADIO CONTROL & EQUIPT. 25¢
RB RAILROAD BULLETIN 5¢
DISPLAY MODEL SHIPS WOOD HULL 25¢
SC SLOT RACING 5¢

OVER 40,000 DIFFERENT MODEL BUILDER SUPPLIES IN STOCK RIGHT NOW
MAIL THIS ORDER BLANK NOW
AMERICA'S HOBBY CENTER 146 West 22nd St. New York, N.Y.10011
PLEASE PRINT NAME & ADDRESS PLAINLY
RUSH ORDER TO
NAME
ADDRESS
CITY ZIP & STATE
HOW TO ORDER
Send payment in full. No C.O.D.s We accept cash, check, money order, stamps or foreign exchange. Outside U.S.A. add 10% of total order PLUS 50c special wrapping. WE PAY POSTAGE ON ALL ORDERS OVER $3.00
If order is under $3.00 enclose 25¢ for postage & packing.

QUANT.	PRICE EACH	NAME & DESCRIPTION OF ITEMS (MODEL # IF KNOWN)	TOTAL
	25¢	128 PAGE HO MODEL RAILROAD CATALOG	
	25¢	64 PAGE MINI-HANDBOOKS (LIST NUMBERS)	
	25¢	IF ORDER IS UNDER $3.00 ENCLOSE 25¢ FOR POSTAGE & PACKING. C-666 TOTAL	

This handsome volume, covering the years 1848 to 1956, will fill a void in the library of all true lovers and students of the romantic steam era of American railroads. The priceless photos and other historical material in this book will fascinate and delight the real steam buff and all others interested in the historic development of our country's railroads. Hardbound, beautifully jacketed, its 208 generous 8½"x11" pages contain:

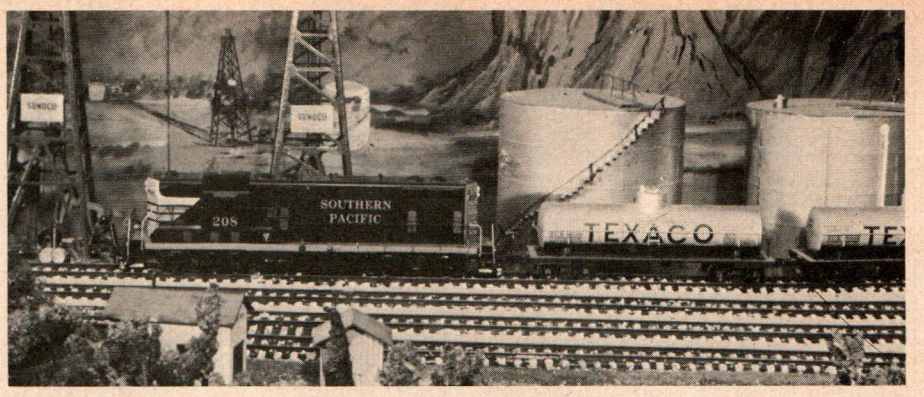
Over 300 locomotive and train photos depicting historical steam of this great railroad in action. Most of these pictures are rare and previously unpublished.

C&NW RY Steam Power sets a new high in filling the desires of the historians and steam buffs. Quality photo reproduction and excellent printing makes this book an outstanding value. It is a must in any railway library. Printed by Rand McNally & Company.

ACT NOW . . . MAIL TODAY!

KNUDSEN PUBLICATIONS
3539 North Lincoln Avenue
Chicago, Illinois 60613

Send ..... copies of C&NWRY Steam Power
$10.00 Postpaid (Illinois Residents and 4% for sales tax)
Amount enclosed $..... Check ..... Money Order .....
Name .....
Address .....
City ..... State ..... Zip .....



Jersey Central camelbacks share trackage with Union Pacific Challengers on Gordon Fessler's giant O gauge pike. Among the growlers is this Espee Geep. Pike will be viewed by NMRA-ers.

sales on subway cars. However, we noticed some imported cars recently by Ken Kidder, ready to run, for scale or Lionel track. And there are a number of suitable trolley kits available which would do right well on any subway-el line. Ed.

Fred Chemidlin

Model railroading has just lost another of the old timers in the passing of Fred Chemidlin, formerly of Midlin Models. I feel like I have lost a good friend, as Fred and I were always rather close. Thought you might like to know.

Howell Day
P. O. Box 301
Dunellen, N. J. 08812

Making Your Railroad Pay

I have worked out a way to make my railroad equipment pay for itself, in a way. I give each visitor a scale person and an industrial siding. I keep a set of books as a real railroad would do, deciding on a fair rate and post them. For example, 3c per mile for every scale person. $50 rents a boxcar plus $1.00 per ton mile. This system proves very profitable.

Peter Mazzone
170 Williams St.
Taunton, Mass.

Maybe Phineas T. Barnum was right. Ed.

RMC TIMETABLE

NOTE: Items for RMC TT are welcome but must be received 6-8 weeks before issue in which item is to be inserted. Please print or type.

NATIONAL MODEL RAILROAD ASSOCIATION
1966 ANNUAL CONVENTION
AUGUST 17-21
SHERATON-GIBSON HOTEL
CINCINNATI, OHIO

National Conventions

CINCINNATI, OHIO, Aug. 17-21. Sheraton-Gibson Hotel. National Model Railroad Association, Inc. Advance registration: Rails, $26.00; Railettes, $23.50; Youths, (12-18), $16.00; Children under 12, $10.00. Clinics, model contests, banquet, fan trips, manufacturers displays, operating layouts, more. Blue Ribbon Convention Comm., 4538 West 8th St., Cincinnati, Ohio 45328.

NMRA Regional Meets

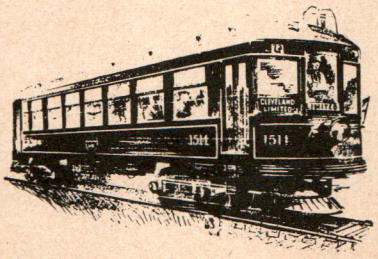
LA GRANGE, ILL. Oct. 9. Midwest Region Fall Meet, Electro-Motive Div., Demon, clinics, contest, op. Model RRs, tour of shops and grounds, auction, banquet. Info Walt Barry, 9410 Drake Ave., Evanston, Ill. 60203.

WAREHOUSE POINT, CONN. Sept. 24: Nutmeg Div. N.E.R., N.M.R.A. will hold operation at Warehouse Trolley Museum. Info. contact Charles E. Bettinger, 52 Devon Dr., Manchester, Conn. 06044. Tel. 643-5925.

BOISE, IDAHO. Aug. 5-7. Pacific Northwest Region (host, 5th Div.). Clinics, contests, slides, movies, Boise Area Model RR Club, private layouts, banquet. 200-mile steam pwrd. spec. train ride on U.P. main line Boise to

NORTHERN OHIO INTERURBANS *

NOW IN ITS 3rd BIG PRINTING



THE COMPLETE STORY of the great electric traction network that radiated through northern Ohio . . Ride the big Interurban Limiteds again . . City Trolleys galore . . Freights . . Mail Cars . . Funeral Cars . . Excursions . . Amusement Parks . . Steam Train Days . . Dummy Lines . . Horse Railways . . Hundreds of rare photos . . In depth studies of the Cleveland and Shaker Rapid Transits . . Secret Cleveland facts . . and of historical note, a chapter personally written by O. P. Van Sweringen, never before published, on the development of Shaker . . the PAST, PRESENT, and FUTURE OF TRANSIT IN NORTHERN OHIO sweeps before you in this exciting panorama. 80,000 words! plus 475 Maps, Timetables, Rosters, Railroad Rarities!

ONLY $4.95 FROM NORTHERN CALIFORNIA INTERURBANS,
P. O. BOX 5147, CLEVELAND, OHIO 44101

Huntington, Ore. and return. Info. & reserv. contact: James Dunbar, P. O. Box 4242, Boise, Idaho 83705.

Club Shows

BEDFORD, ENGLAND. Sept. 2,3,4. Bedford & District Model Rwy. Soc. Annual Model Engineering Exhibition, The Corn Exchange, Bedford. All ga. in model rail, incl. live steam & traction eng. Hours: Fri. 1:30 PM-9 PM; Sat. 10:15 AM-8 PM. Sun. 10:30 AM-5 PM at Longholme Lake, The Embankment for model power boats & live steam rail exhibition. Adults: 2/- ($.28), Children 1/- ($.15). Contact Mr. Ron Tansley, 92 Foster Hill Rd., Bedford.

WALNUT CREEK,, CALIF. Sept. 23, 24, 25. Walnut Creek Model RR Soc. Fall Show, Railroad Ave., across from S. P. Station. Op. large HO & narrow ga. (HOn3) layout Hours: Fri. 8-10 PM, Sat., 2-10 PM. Sun., 2-8 PM. Adults: 50c, Children 25c. Info. R. Dannenbrink, Secy. P. O. 1078, Walnut Creek, Calif.

HAGERSTOWN, MARYLAND. Aug. 8 thru 13. Hagerstown Model RR Club, Inc. Summer Show at Fairgrounds. Hours: 6-11 P.M. Adm. free. O & HO Gauge. Info. Dennis W. Masters, 15 Harvard Rd., Hagerstown, Md. 21740.

HAMMOND, IND. Sept. 10-11. State Line and Indiana City Model RR Club Fall Open House. 4601 Hohman Ave. Hours: 1-6 PM. Adm. free. Further info. contact Jim Plenus, 837 - 169th Pl., Hammond, Ind.

Club Notices

PHILA., PA.: Metro. Phila. Rwy. Assoc. seeking new members. Club building trolley museum (also model traction activity). Meetings 2nd Sat. of month at 24th PAL, Belgrade & Clearfield Sts., 8:30 P.M. Guests welcome. Contact: M.P.R.A., P.O. Box 7285, Phila., Pa. 19101.

LYNBROOK, N.Y. Long Island "O" Gauge Society. Scale ¼" 2 Rail. Days 10-6: George Henglein, 516-LY 9-7080; Eve. after 8 P.M.: George Shapiro, 516-RO 4-8008.

Fan Trip

PORTLAND, ME. Oct. 2. Steam Train excursion sponsored by The 470 RR Club, div. RR Enthusiasts, Inc. Leaves GT Station 7:30 A.M. EDT to Island Pond, Vt. Photo stops, run bys. Snack bar on train. Arrives back in Portland 8 P.M. Fare: Adults $12.50, children 6-12 $7.00. Info. contact Phillips Prince, 73 Skylark Rd., Portland, Me. 04103.

Trolley Meet

CLEVELAND, OHIO. Sept. 31, Oct. 1, 2. Fall Trolley Men Meet, host Western Model RR Club of Bedford. Operations, movies, slides. Fri. 7-10 P.M., Sat. 1 P.M. to ? Sun. 10 A.M.—Noon ride on Columbia & Southwestern —$2.00 per person; 1 P.M.-5 P.M. op. at club. Adm. 1 or more trolley cars of any scale. Info. contact Warren D. Smalley, 2999 Grandview Ave. Cleveland, Ohio 44106. Phone 216-321-5175.

BEDFORD, OHIO. Sept. 30, Oct. 1-2. Western Reserve Model RR Club Trolley Meet, 30 South Park St., Bedford. Op. O & Ho trolley and steam layouts will be featured. Info, contact Warren D. Smalley, WRMRC, Box 282, Bedford, Ohio.

DISPATCHERS REPORT

Athearn's new cow and calf Electro-Motive SW-1500 switcher reportedly selling like mad. Available in a variety of road names. The calf is identical to the switcher except for the lack of cab . . . When we saw Irv Athearn on the coast recently, we mentioned having seen two new blue and white Electro-Motive demonstrators pulling a heavy freight past our office, westbound on the Erie to which Irv pulled out a model of the same blue and white EMD SD-45 demonstrator and advised us that it would be offered as a limited run engine only, with cadimum wheels rather than the customary brass wheels found on the other road name versions of the Athearn SD-45. Price is the same: $14.95 RTR . . . Tool and die work on the GP-35 and DD-40 is progressing and both of these should be available before long.

Visitors to Los Angeles for the first time have probably stared is disbelief at the palm trees which blanket the area. HO models of these unusual trees are now available from *H. O. West*, a new California manufacturer, also readying some industrial type structures.

Historical Scale Models, 829 Elm Ave., San Gabriel, Calif., is another

RAILROAD EMBLEMS
(CLOTH PATCHES)
More than 200 Road Names
Some Very Rare
Send 20c in coin or stamps for 16 page catalog, or send one Dollar for 2 patches and 16 page catalog.
M. B. AUSTIN
138 W. 25th Avenue San Mateo, Calif.

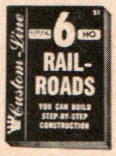
HO LIMITED QUANTITY HO
CPR G-3 Pacific, United, ... $ 69.95
ATSF 2147 class 0-6-0 ..... 45.00
ATSF streamlined 4-6-4 ..... 150.00
PRR K-4 de-modernized (United) 85.00
SAE for full list new and used HO locos
(3% sales tax for NJ orders)
WILLIAM SCHOPP
445 S. Logan Ave. Trenton, N. J. 08629
Phone (609) 695-2202
Carbon electrode soldering tweezers $22.50

PLAY IT COOL IN THE HOT SUMMER MONTHS AHEAD

SEE YOUR DEALER FOR THESE ATLAS "HOW-TO-DO-IT" REFERENCE BOOKS... they give you the answers to just about any model railroading question or problem. Dozens of terrific layouts, too — all illustrated with step by step assembly details.

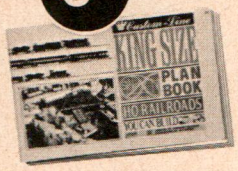
"CUSTOM-LINE" LAYOUT BOOK Here's the one fact-filled book that gives you the answers to every phase of scale trackwork and layout. Tells you exactly what-to-do and how-to-do-it . . . with every detail beautifully illustrated. 48 pages, magazine size. $1.00

"WIRING YOUR HO LAYOUT" First time published in one complete, easy to follow reference book! It covers and simplifies almost every phase of HO scale layout wiring. Electrical work becomes a "snap" with this book as your guide. 48 pages, magazine size. $1.00



"6 HO RAILROADS" Six of the finest "HO" scale layouts that you can build . . . with the most complete and detailed step-by-step instruction. Absolutely no guesswork! Every step of each layout is fully explained. Book is 48 pages, magazine size. $1.00

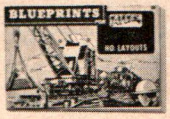
$3.00



NEW KING-SIZE HO RAILROAD PLAN BOOK... MEASURES A BIG 3 FT. ACROSS WHEN OPENED UP
No one . . . not even ATLAS — has ever offered this kind of gigantic, king-size (2" to the foot scale) reference book — with such an abundance of photos, sketches and easy to follow instructions on every phase of HO railroading PLUS six all-new railroad layouts with complete step by step instructions.

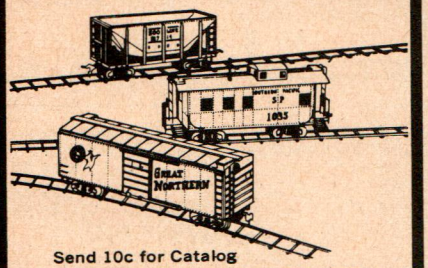
"HO" SCALE MOTORING LAYOUT MANUAL A comprehensive layout book . . . with 50 exciting motoring and racing layouts. Also includes tips and hints on wiring, testing and trouble-shooting . . . as well as combining with HO model railroad layouts. 25¢

SNAP-TRACK LAYOUT BOOK Here's the sensational 32 page booklet that everyone's talking about. It shows you how to assemble and wire 12 excellent layouts. It's loaded with pages of tips and hints on the use of famous Atlas Snap-Track products. Illustrated. 25¢



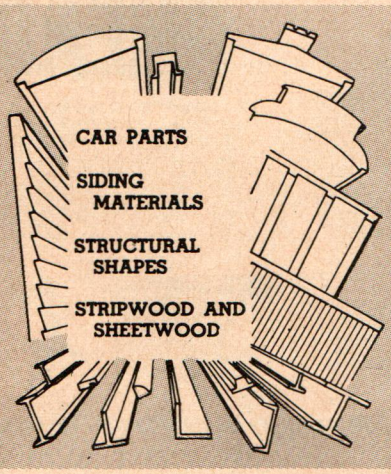
ATLAS TOOL CO., INC.
378 Florence Avenue, Hillside, N. J.
Gentlemen: I tried several dealers and cannot order the following books. I enclose $_____ (sorry, no stamps) for the book or books checked below.
NAME_____
(Please Print)
ADDRESS_____
CITY_____ ZONE_____ STATE_____

☐ CUSTOM LINE LAYOUT $1
☐ HO MOTORING LAYOUT BOOK 25¢
☐ WIRING BOOK $1
☐ KING-SIZE LAYOUT BOOK $3
☐ 6 RAILROADS $1
☐ SNAP-TRACK LAYOUT BOOK 25¢

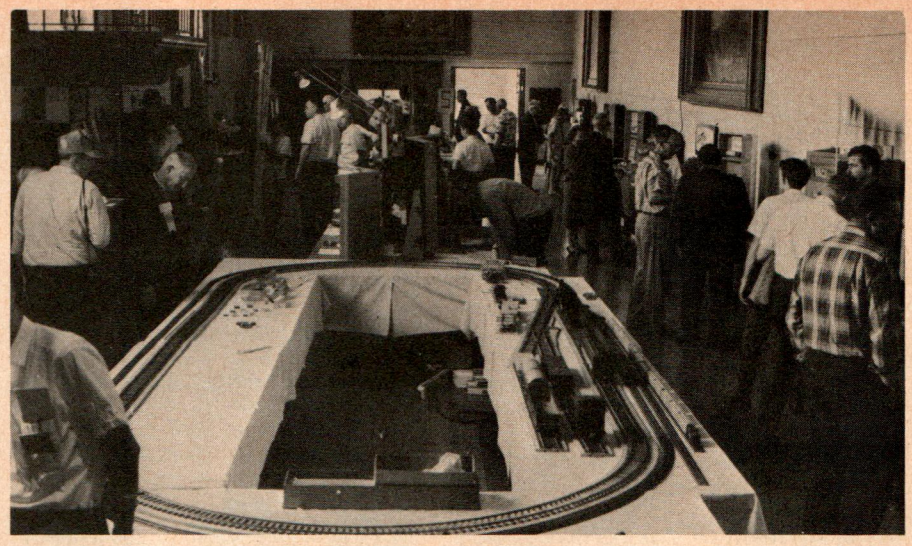
ROUNDHOUSE Products
QUALITY CARS

Send 10c for Catalog
MODEL DIE CASTING INC
P O BOX 926 | HAWTHORNE | CALIFORNIA

"BONUS DETAIL" with Cal-Scale

Illustrated Folder 15¢
"HO" CAL-SCALE
P. O. BOX 475 PINEDALE, CALIFORNIA

GOING TO BUILD?
Northeastern has just installed 8 brand new West German precision wood cutting machines, giving us the finest model wood ever. NEW—HO 1" scale thick fascia strips.
TT — HO — S — 0


SEND 25¢ NOW for new catalog listing many new items plus your packet of more than 30 samples of our famous wood parts. (Be sure to state your gauge)
NORTHEASTERN
SCALE MODELS, INC.
BOX 1A BALLARD VALE, MASS.



Feature of PCR Riverside regional convention was model railroad manufacturers' display with over 50 exhibits, Layout in foreground is Standard Gauge 2-rail pike by Model Engineering Works.

new HO structure manufacturer. All of their buildings are designed from historic western originals, including the distinctive Santa Fe mission type station seen at various points in the southwest, and the Southern Pacific's huge rambling old wood depot at Laws on the now abandoned narrow gauge line. The HSM model kit line is primarily of wood construction.

Real Like Models, Box 536, Chula Vista, Calif., offers a new 1966 catalog for 25c describing their structures in HO and N gauge. . . . *Ken Kidder,* Box 213, San Francisco, Calif. 94101, has new catalog sheets of his HO and HOn3 equipment and parts. Yours for a 5c stamp. Kidder's RTR HOn3 steam dummy unpainted at $19.50 is a cutie.

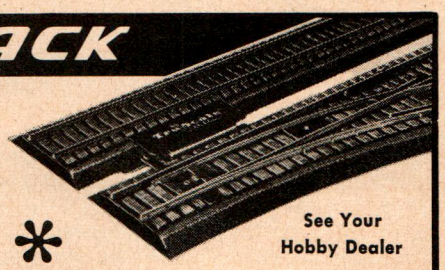
Model Die Casting offers a wide variety of HO freight cars having die cast metal frames and moulded bodies. A dime to P. O. Box 926, Hawthorne, Calif., brings their complete train catalog.

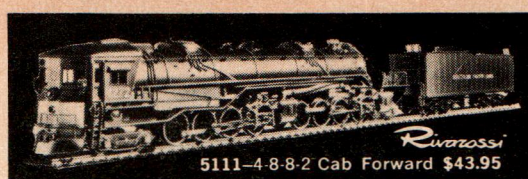
Campbell Scale Models, Box 121C, Tustin, Calif., has just released a new track test light for all gauges at 98c. Just lay this one on the tracks for easy testing. Complete Campbell catalog of HO structures and bridges is 35c and quite fascinating to study.

And still another California outfit with a delightful name: the *Thorley Hoople Toy Company,* now making the first real toy Standard Gauge trains offered the enthusiast since 1939. The engine is a 4-4-0 and the passenger cars are open enders. Catalog is $1.00 from 1044 Webster St., Palo Alto, California 94301. These trains will operate on Lionel or Gargraves Standard Gauge track. Do not confuse with strictly-to-scale offerings by *Model Engineering Works,* Box 261, Monrovia, Calif.

Did you 0 gaugers catch All-Nation Line's new tuscan red Erie-Lackawanna boxcar kit No. 3674 with white lettering. A-N provides reporting mark decals for the ends. Complete kit lists at $7.40 and sprung Bettendorf A-N trucks are $2.50 additional. Matching A-N paint (sides are prepainted and lettered) in a 2 oz. bottle, 50c. Address is Box 145, Des Plaines, Illinois. Body type, incidently, is 40 ft. standard AAR and the sides, ends, and roof are all stamped metal.

Boxcar Ken Casford, P. O. Box 5271, Metropolitan Station, Los Angeles, Calif. 90055, now offers 35 different 0 gauge streamlined passen-

READY-TRACK

* READY-TRACK is the only track of its kind . . . with both rail-track and raised, ballasted embankment COMPLETE in ONE PIECE! Creosote stained wood ties . . . Nickel-Silver or Brass Rails, spiked in position . . . rail-joiners . . . the COMPLETE HO TRACK and ROADBED . . . READY for immediate operation! 'READY-TRACK' has the finest complete line of mounted Switches, Crossovers and Crossings that match perfectly.
READY-TRACK features the famed Tru-Scale 'Hi-Speed' Switches with the closing frog, which eliminates 90% of all major derailing problems! No rail-gaps, nor any electrical dead-spots in the rails. The most fool-proof switch ever developed!
See Your Hobby Dealer
Send for Complete Catalog and Instructive Manual; Enclose 25c to cover cost.
SYMBOL OF AUTHENTICITY
Tru-Scale Models
SAN DIMAS, CALIFORNIA



5111–4-8-8-2 Cab Forward $43.95

NOW IN STOCK AT YOUR . . . ahm HOBBY SUPPLIER

5055–GE U25C $16.95

OUR 3 FOOT FLEX TRACK HAS MANY FEATURES:

- Can Be Tightly Curved Without Affecting Gauge
- Exact Scale Rail Profile (Code 100)
- Highly Detailed Plastic Ties, Tie Plates and Spikes
- Rail Height Same As Sectional Track
- Available In Brass and Nickel Silver

NEW

Brass #2530 75¢ Nickel Silver #2630 98¢

Here Is The Coach You Have Been Waiting For!

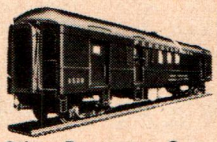
NEW

Full Length, All Detail Shown (incl. Underframe), Ready-To-Run, Metal Wheels. #6264 Santa Fe #6274 Pennsy #6294 N.Y.C. ONLY $3.98

R.P.O. (RAILWAY POST OFFICE) CAR

NEW

ONLY $3.98



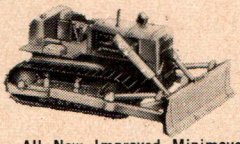
Your Passenger Train Is Not Complete Without an R.P.O. Car. All Of The Features Of Our Other Passenger Cars Are Included In This Car, Plus Extra Features of Metal Wheels.

#6422 Pennsy #6452 N.Y.C.

This Single Slip Switch Is A Valuable

Addition To Your Classification, or Switch Yard. Realistic Rail Profile, Highly Detailed Plastic Ties, Tie Plates, and Spikes. Excellent Operation With Low Drain Switch Motors. Plug-A-Matic Color Coded Wires. Two Motors Are Mounted.

Brass #2519 $7.98
Nickel Silver #2619 $8.98



U-305 49¢ CATERPILLAR BULDOZER

All New Improved Minimovers, Fantastic Details. Many Movable Parts. Some Prices Have Changed.

U-301	Caterpillar Four Wheel Tractor	29¢
U-302	Caterpillar Traxcavator	39¢
U-303	Caterpillar Motor Grader	49¢
U-304	Universal Backhoe Crawler	49¢
U-305	Caterpillar Bulldozer	49¢
U-306	Hamm Road Roller	39¢
U-307	Universal Crane Truck	59¢
U-308	Caterpillar Tractor Scraper	69¢

WHEEL SETS

We Have Received Many Letters Asking For Metal Wheels . . . So Here They Are!

#189033 Set Of 4 (For AHM Freight Cars) . . . . . 79¢
#189034 Set Of 6 (For AHM Passenger Cars) . . . . 99¢

Metal Wheels Will Not Pick Up Dirt, Go-Through Switches Better, Lower Center of Gravity, and Roll Much More Easily. (Your Loco Will Pull Almost Twice As Many Cars if They Have Metal Wheels.)

#6 Curved Switch. At Last You Can Put A Switch On a Curve. This Is 22" Radius on the Outside and 18" on the Inside. All Of The Features Of The Single Slip Switch Are Included. Complete With Switchmotor.

Brass Right Hand #2515	$5.95
Brass Left Hand #2516	$5.95
Nickel silver Right Hand #2615	$6.95
Nickel silver Left Hand #2616	$6.95

NEW

NEW 1966 CATALOG

Complete 32 Page Catalog Shows and Describes All Items — Send 35¢

MAIL ORDERS

Try your AHM Dealer first. If he cannot supply items, send his name and address with your order. On orders of less than $3.00, add 50¢ handling charge

Dept. B-H
Associated Hobby Manufacturers, Inc.
3200 N. Boudinot St. Phila. Pa. 19134

THE FINEST IN HO FROM AROUND THE WORLD

ger car kits and hopes that his streamlined observation car for the Southern Pacific Daylight and Lark won't be too far off in the future. Meantime SP fans can busy themselves on the other cars in the train. A few years back, one of the sleepers offered was operated on the old Erie Limited, in bright yellow Union Pacific lettering.

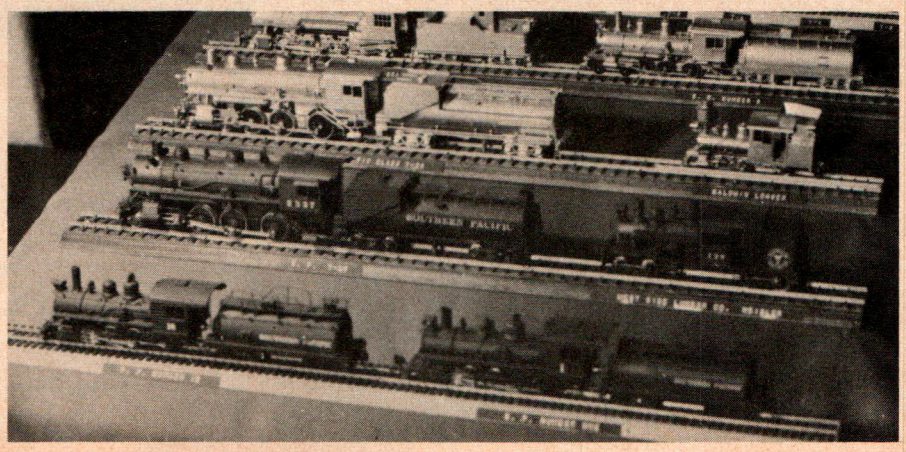
Model Railroad Products, 1379 Mineral Spring Ave., N. Providence, Rhode Island, suppliers of bulk rail, has discontinued code 100 steel rail. They've also added code .125 nickel silver rail for S and O gauge use. We note an increasing number of 0 gaugers turning to slightly smaller rail sections although for heavy duty use and club operation, code 172 is still the answer. We've seen rails worn away through the heavy pounding of solid cast brass engines over a several year period. The code 125 ns rail lists at $10.00 per 99 ft.

Polks Hobbies, 314 Fifth Ave., New York, N. Y. 10001, has one of the largest varieties of small model railroad lamps and bulbs we've ever seen. They include grain-of-wheats, miniature round, miniature screw socket, button bulbs, fluorescent shape, gas lamp, blinker bulbs, and many more. Many are offered in a variety of colors and voltages. An assortment of these bulbs is a convenience when settling down for a long model building session.

Associated Hobby Manufacturers, Inc., 3214 North Boudinot St., Philadelphia, Pa. 19134, has a number of new items. Their Fairbanks-Morse C-Line diesel A unit is now offered in the latest New York Central lettering on an all spray painted black body at $8.95 RTR. AHM is also receiving more Casadio track components, now at most dealers. For a look at the complete AHM line and the many new HO releases, send for the 1966 AHM catalog at 35c.

Trolley Museums

Sharpe Delaney's article on the *Orange Empire Trolley Museum* elsewhere in this issue shows only a small fraction of the over 60 trolleys and cabooses on this growing property and we thoroughly enjoyed a special run over the line in a Pacific Electric interurban. The OETM includes in its roster a double decked Irish tram, New Orleans wide gauge No. 913 converted to standard gauge (Another NOPS car at the Arden Museum has been able to retain its broad gauge trucks since the Arden Museum is the only museum operating broad gauge trackage.), a Sacramento Northern steeplecab, and a Fresno Traction Co. lightweight in restoration. Most of the equipment is Pacific Electric and Los Angeles Railway. LARY equipment is all 42" gauge and much of the OETM track-



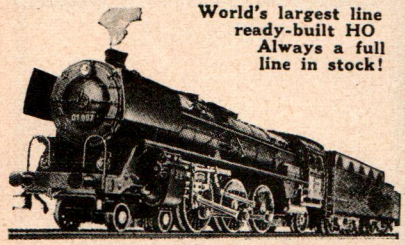
HO and HOn3 brass locos were eyecatchers at West Side Models display. Narrow gauge hogs include both SP and D&RGW, plus Heisler.

age is dual gauge, permitting operation of all equipment now in operating equipment.

Maintenance is a big problem at all railway museums and Orange Empire is fortunate in having its equipment stored in the mild climate of southern California. Nevertheless shops and carbarns are high priority projects. Associate membership in the line is $2.00 per year. Write Jim Walker, secretary, P. O. Box 501, Perris, Calif. 92370. Active members are also welcomed to work on cars, lay track, and learn to operate equipment.

MÄRKLIN

HO Ready-to-run Trains are Made by Precision Craftsmen



World's largest line ready-built HO Always a full line in stock!

SEND FOR OUR NEW CATALOGS

1967 MARKLIN CATALOG __ .50

Combined with HAMO HO traction trolley system. Also NEW HO D.C. ENGINES designed by Marklin. Complete in above catalog with 50c refundable coupon.

1967 RAPIDO N ga. Catalog .50

Catalog complete with steam and electric engines, cars, track, switches, figures and buildings.

AUTHORIZED SALES & SERVICE

ALL ORDERS SHIPPED OUT SAME DAY AS RECEIVED

NICHOLAS SMITH

60 N. 11th St. Philadelphia 7, Pa.

Regionals

We managed to take in two spring regionals during May. *Mid-Eastern Region* held their convention at the Abraham Lincoln Hotel in Reading, Pa. Highlights included trips to the WK&S museum line, Roadside America, and the Reading live steamers. Of the five Brotherhood of Railroad Trainmen caboose entries in the contest, four were quarter inch scale and only one in HO! Clinics and other activities in the hotel kept things lively for those who didn't want to brave the elements outside. And three rousing cheers to a new contest winner, Bob Coriston, of Philadelphia, who made his debue with six different winners plus best-of-show and ended up treating a large party to champagne.

At Riverside, California; the *Pacific Coast Region* held their affair at the Mission Inn, drawing nearly 400 modelers. Again, the model contest was one of the big highlights though it was hard to get near the displays due to the crowd. A model railroad manufacturer's exhibit, included displays by over 50 suppliers, about 25 of whom were on hand to explain their wares

PERMA-SCENE
SCENIC TERRAIN
REALISTIC! EASY!

Earthy color, realistic. Easy to use. Crack resistant. Fireproof. Feather weight.

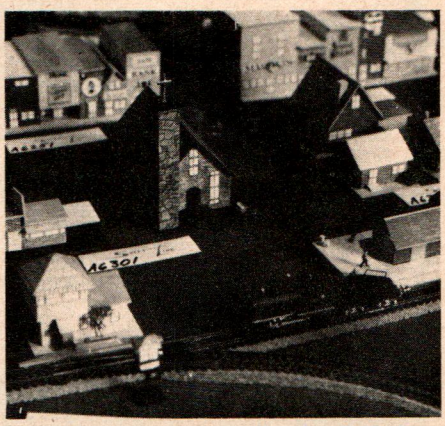
Next to nature Perma-Scene makes the most realistic model scenic terrain AND it's so easy to use too. Just mix it with water, spread over wire screening, let dry. Easily painted. Produces the ultimate in scale realism.

Regular size (covers 8 sq. ft.) **$1.00**
King size (almost 3 times as much) **$2.00**

AT YOUR DEALER

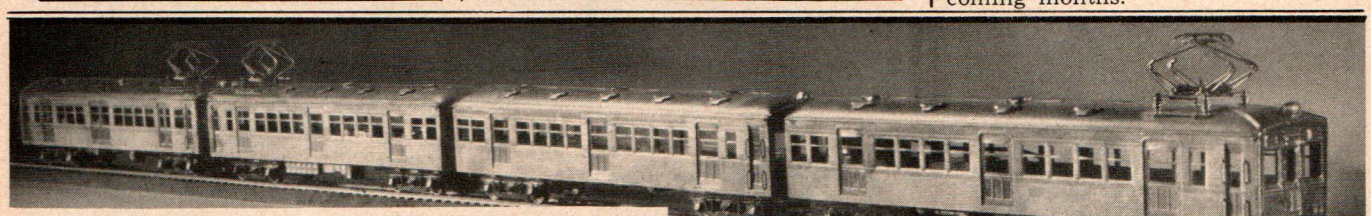
PERMACRAFT PRODUCTS, INC.
550 E. Erie St. Painesville, Ohio

Balboa's display featured new early SP cab-forward with whale tender, Shinohara track.

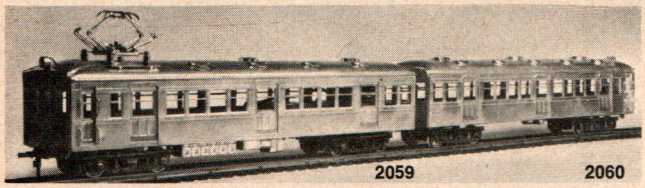


New N gauge structure line by Swift Line

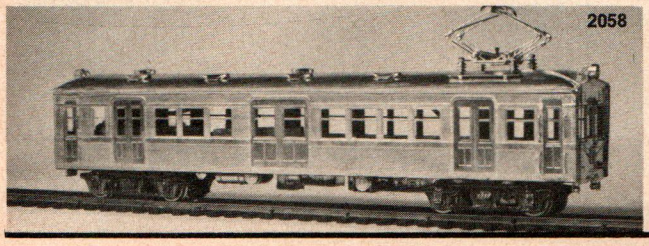
Among the highlights of the manufacturers exhibit was a standard gauge layout, 2-rail scale, by *Model Engineering Works'* Dick Wheeler, the *Kemtron* waterfront scene in 0 scale by Al Armitdge seen last fall at Vancouver, and two interesting signal and block systems by *Campbell Scale Models* and *Dana Industries,* of which more will be heard in coming months.



HO RAPID TRANSIT



2059 2060



2058

Do you like the quiet efficiency of electric transportation? Do you like single car interurban-like operation...bustling 10-car trainloads of commuters . . . The dark mystery of a tunnel route . . . Rumbling "L" trains . . . Back yard running . . . roadside running? If any of these strike a responsive chord, then you may be a transit addict. Take a look at this variety of transit cars—all brass—smooth running, and all ready-to-run.

HOn3 TRACK - LATEST PRICES	
8000—19½" sect. flex. track	$0.65
8001—RH No. 4 switch	2.95
8002—LH	2.95
Spikes—bag of 500	.30
Rail joiners—pkg. of 24	.50

2058	57-foot mail-baggage motor (could be used as passenger)	$19.50
2059	57-foot passenger motor	19.50
2060	57-foot passenger control trailer	10.50

Send 5¢ stamp for new list of HO and HOn3 models

AT YOUR DEALER OR POSTPAID DIRECT

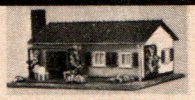
KEN KIDDER BOX 213, SAN FRANCISCO, CALIF. 94101

ACCESSORIES THAT LIGHT-UP MAKE LAYOUTS COME "ALIVE"!

ARISTO-CRAFT — DISTINCTIVE MINIATURES

No. 10 — MODERN RANCH HOUSE 89¢

No. 11 — L-SHAPED RANCH HOUSE $1.19

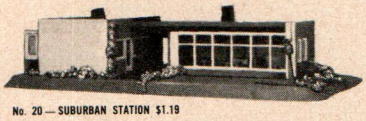

No. 12 — HOUSE W/PATIO $1.19

No. 13 — COUNTRY GAS STATION 89¢

No. 14 — ICE CREAM STAND 89¢

No. 15 — SUMMER COTTAGE 49¢

No. 1 — FARM HOUSE 69¢


No. 20 — SUBURBAN STATION $1.19

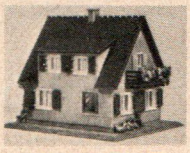
No. 2 — COUNTRY COTTAGE 59¢

No. 4 — HOUSE W/SHED 79¢

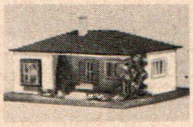
No. 5 — HOUSE W/EXTENSION 89¢

No. 3 — HOUSE W/TRELLIS 79¢

No. 7 — 2-STORY HOUSE W/FENCE 89¢


No. 8 — HOUSE W/DORMER 98¢

No. 6 — HOUSE W/BALCONY 79¢


No. 9 — RANCH HOUSE 69¢

HO BUILDINGS KITS

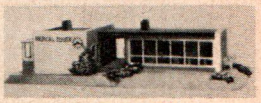
REALISTIC REAL ESTATE MODELS
for VILLAGES ■ DISPLAYS ■ TABLE TOP ROADWAYS

This exciting range of "super" detailed houses are 1/87 scale. Not undersized or skimpy, they are ideally suited for architectural modeling. Christmas villages, HO train layouts and city planning. Aristo real estate has the EXTRA detailing not found in other models, such as: doors, windows and shutters that actually open and close. All parts are ready-painted and made of sturdy plastic.

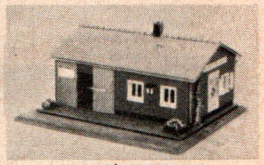
As an EXTRA BONUS — you get 9 Figures & Light with each model! Compare! Aristo offers MORE EXTRA FEATURES to the discriminating buyer.

BIG BONUS!
INTERIOR LIGHTING...
IT LIGHTS UP!
PLUS 9 REALISTIC FIGURES

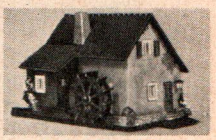
AMAZINGLY LOW, LOW PRICES of 49¢ to $1.19

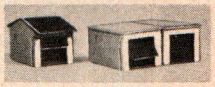

No.18 — MEDICAL CENTER $1.19

No. 1002 — ASSORTED FENCES 49¢


No. 19 — FREIGHT STATION $1.19

No. 1003 — ASSORTED BENCHES 49¢


No. 17 — WATER MILL 79¢


No. 16 — THREE GARAGES 49¢

No. 1004 — TABLES & CHAIRS 49¢

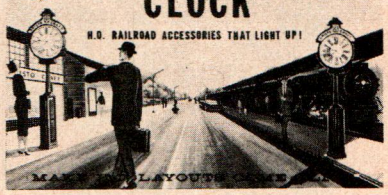
DIESEL SWITCHER

You'll find a million uses for this tiny, powerful 4-wheel diesel switcher. Finely detailed, powerful permag motor, NMRA type couplers. Takes streetcar curves. Great for customizing

$4.95 RTR

H.O. ILLUMINATED CLOCK

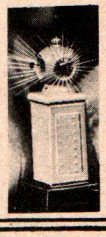
H.O. RAILROAD ACCESSORIES THAT LIGHT UP!



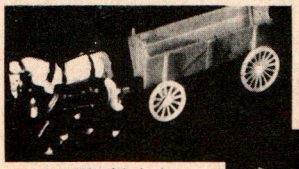
FOUR-FACED CLOCK
No. 28 (One On a Card) — $1.00

TWO-FACED CLOCK
No. 27 (Two On a Card) — $1.29
No. 27S (One On a Card) — 75¢

BLINKING SIGNALS
No. 25 (one each) — $1.89
No. 25 SRR (Single R.R. Signal) — $1.00 ea.
No. 25 SH (Single H'way Signal) — $1.00 ea.



WALK-DON'T WALK TRAFFIC SIGNAL
No. 13 (One On a Card) — $2.00



PACKED IN CLEAR ACETATE BOX FOR PROTECTION & VISIBILITY

No. B HAYWAGON (3½" long)
HAND COLORED! BEAUTIFULLY DETAILED
No. C BUCKBOARD (2¾" long)

3 for $1.00

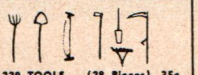
No. A PEDDLER or MILK WAGON (3¼")

No auto racing or country side landscape is complete without these authentic horses and wagons. They're the "touch" that means so much!

HO HORSES & WAGONS

HO AUTO TRANSPORTER

SPECIAL SALE


No. 229 TOOLS (28 Pieces), 35c

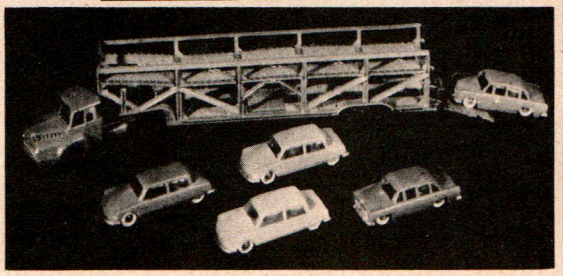
No. 209 BIKES 6 Pieces), 59c
No. 231 BOATS (3 Pieces), 59c

ALL 3 SETS, ONLY $1.

WITH 5 CARS
IDEAL for AUTO RACING SYSTEMS & HO LAYOUTS

Authentically detailed truck comes with 5 "like-real" autos. Tail gate opens to form ramp so cars can be driven on or off. Overall length: 8 3/4"

$1.29 ppd.



Visit Polks! See 5 Funtastic Floors of Hobbies and Toys from the World Over. Just 2 Blocks South of Empire State Bldg.

SEND CHECK OR MONEY ORDER — NO C.O.D.'S PLEASE

POLKS Hobbies DEPT. RRMC 86)

314 FIFTH AVE. (32nd ST.) NEW YORK, N. Y. 10001

SEND FOR CATALOGS

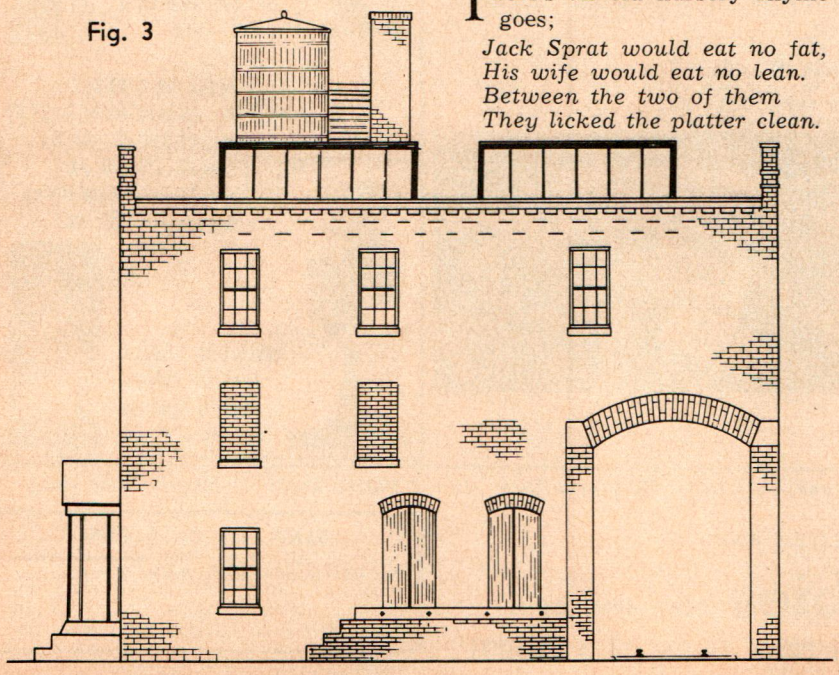
Old-Time Locomotives. Fully illustrated showing all unique historic locos & HO accessories. 15c
Collector's Military Figures $1.00
Aristo HO railroad, Radio-Control Catalog 35c

SPRATT & KEAN--MEAT PACKERS

Impressive with its ramps and covered siding, the Spratt & Kean Meat Packing Plant takes remarkably little room on a railroad yet brings in many cars.

by E. L. Moore

Fig. 3

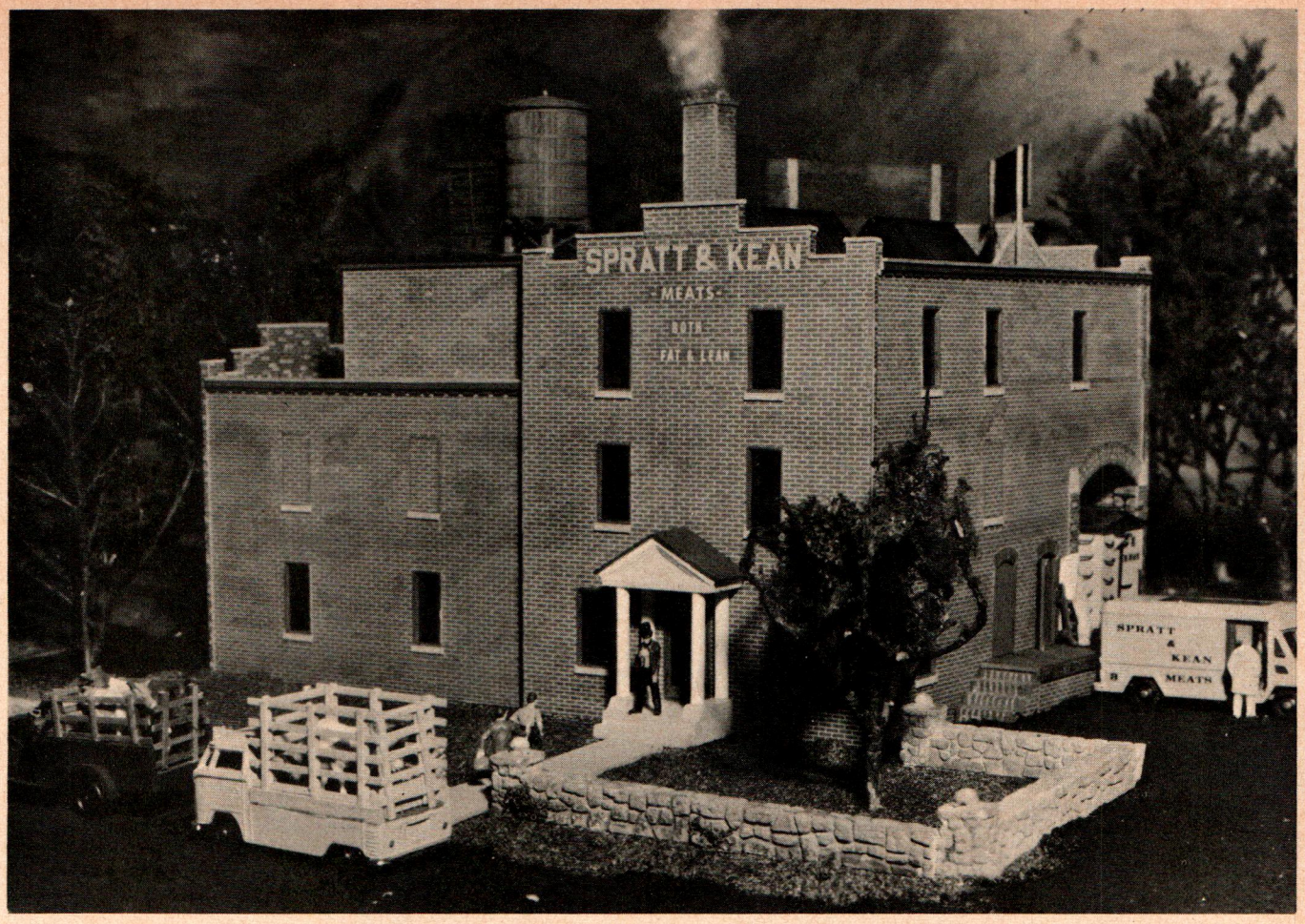


There's an old nursery rhyme that goes;

Jack Sprat would eat no fat,
His wife would eat no lean.
Between the two of them
They licked the platter clean.

The Spratt and Kean, now of meat packing fame, are descendents of that well known couple and I understand, quite fittingly still carry on the old family feud.

The Story Of Meat, fathered by Mr. Swift who also lays some claim to meat packing fame and from which I gleaned a bit of valuable information, was not issued until the mid-thirties; but since he doubtless took a page from past experiences we might safely date a plant of the sort he describes as being a product of the twenties. As you will note, stock is unloaded into the holding pens below where they undergo inspection, then are driven up the ramp to the third floor inside pens from which they are taken as needed and slaughtered. The carcasses slide along on a disassembly line where their fur coats and insides are removed, then they are shoved into the refrigeration room which sits atop the two story wing. Later, the meat drops down to the second floor where workers with keen knives cut it into proper sizes and shapes. Another drop



LEFT—The grand opening of the Spratt & Kean Meat Plant back in the 1920's, when all the brickwork was nice and clean. GOW bulbs provided the light for this long time exposure.

ABOVE—Daytime view of the front, which is the least interesting. Note how some windows have been bricked over. Trucks have also been decal lettered for name of the meat company.

to the first floor and it is prettied up in fancy packages ready for shipment, whether locally by truck, or into refrigerator cars that are handily available for long distance hauls.

At first glance the structure looks huge—actually it covers only an area of 50' x 65', or approximately 7" x 9" including the holding pens and siding. However, since part of it stands a full three stories high it is a rather imposing plant.

You'll need to place an order for a few carloads of brick before commencing. I used Mr. Northeastern's red brick sheets which are 3½" x 12", and it took four of them, plus some balsa, and the total cash outlay for this sumptious meat palace (you furnish the labor) will run in the neighborhood of $3.50 or $4.00. Here, though, is an itemized list, in HO:

- 4 sheets brick, 3½" x 12", for walls
- 32" 1/16"x4" balsa, reinforcement and upper floor
- 14" 1/8" x 4" balsa, roof tops
- 50" 1/32" or .020 x 1/16" stripwood for fencing
- 25" 1/16" x 1/16" balsa or stripwood for posts
- 2" x 10" acetate for skylights and windows

Since there is no base or lower floor we'll begin with the three story walls of the main structure. An unusual aspect of this building is that its front is the least important side and the least likely to be viewed. Check with Figures 1 and 2 and cut end walls which are 30' wide by 38½' high. Since brick sheets measure about 25½' wide this calls for piecing at a level with the upper windows. Cut out the ornamental top, then face the rear side of this with brick, or else 1/16" balsa covered with brick paper (I used both methods) down to a depth of 5½'. Then add 1/32" balsa caps with slight overhang to simulate concrete.

There are six window openings 3' x 6'; and one 4' x 8' door opening, this set 2' up in the middle of the front wall. Each opening is cased with 1/32" x 1/16" prepainted green stripwood. Inside this, at the back I used 1/32" square stripwood as window stops—or you can cement strips of paper to the back side to provide a backstop for the windows when installed. And by now you may have counted the windows in the structure —if you haven't, there are 20—and if you think that's a lot you should have taken a gander at the original plans with 34 windows. As though the old English window tax man was on my back I began eliminating here and bricking up there until I finally wound up with *only* 20. Below each window I cemented a simulated concrete window ledge of 1/32" x 1/16" stripwood.

The doorway has a transom, leaving a space of 3½' x 6½' for the double door; so, cutting a piece of acetate to fit the opening I cemented prepainted green stripwood, .020 x 1/32" to form top and sides, then a .020 x ⅛" strip across the bottom. There's no need to cut the doors apart, just draw a black line down the middle, insert the doors and there you are.

Now for the portico which isn't as difficult as it may look, and which adds the touch that offsets the plainness of the front. First, the concrete steps, which are of ⅛" balsa, 8' wide, 6½' deep and 2' high, 2 steps. On this, ⅛" balsa, 18" wide by 4½' long, one at each side simulating concrete, providing a base for the columns. Next, 4 columns, each 12" in diameter and 8' tall.. These I made by rounding ⅛" square balsa, then force twisting it through a ⅛" drilled hole; or you can use ⅛" doweling. Cement the steps in place and the rear columns against the brick wall. Set the other two at the front of the base in cement. Now to the roof. I cemented ⅛" balsa together to make a solid piece 3½" thick, 10' wide and 3¾' high, then shaped it with a blade and sanding. The front trim consists of 12", 9"

Railroad siding rolls under the meat packing plant, permitting clean loading of shipments leaving by rail in refrigerator cars. Plant could be made larger to suit any given area.

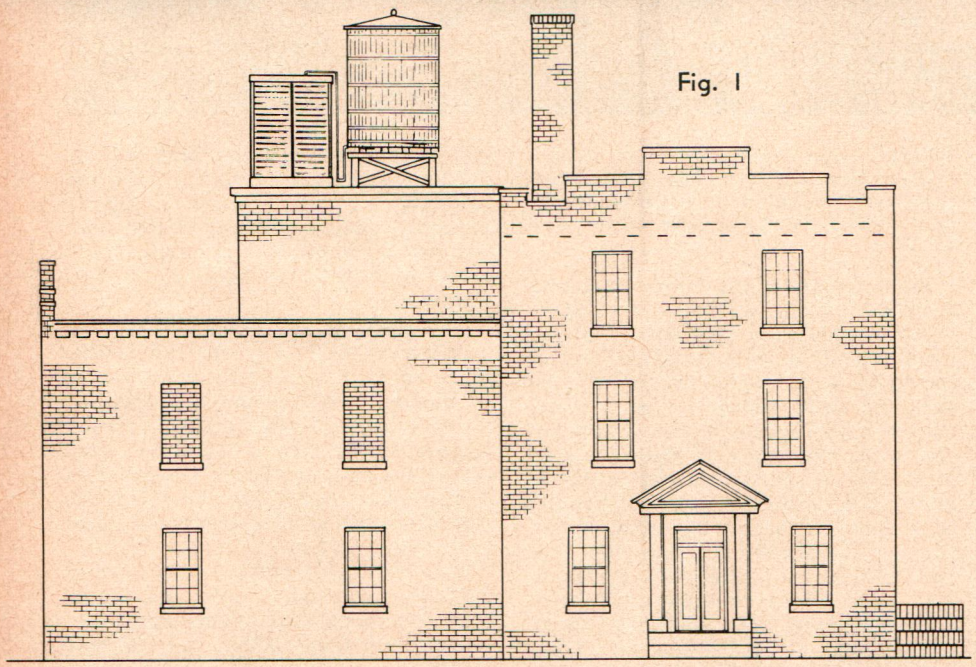


Fig. 1

and 6" boards laid over each other—that is, 1/32 x ⅛" laid on first, then 3/32" and 1/16" as the top facing. This, and the columns were given a couple of coats of white, and a roof of 1/32" balsa (each side 4½' x 6') added and painted a dark green. Now cement this to the brick wall and onto the columns and you have it made.

This, too, is the time to add your decals if you're going to dress up this side. I used Champ ¼" Bold Gothic for the firm name, and for MEATS ⅛" extended Gothic—and the lower lines in 3/32" condensed Gothic. I used white rather than black for two reasons. First, I was afraid black might stand out too boldly, and secondly, I didn't have black. I then painted around the decals using a red to subdue the mortar lines which were distracting and to make the lettering stand out more clearly.

At this point there comes up that old debbil problem of aging and weathering; that is, unless you like the looks of newly minted brick. I did considerable brushwork that doesn't show in the photographic image, but then there is a lot of surface to cover. Using a fine pointed brush and yellow ochre water color and going over the mortar lines and distorting them does a beautiful job but is tedious. For large scale aging one can stipple with a sponge. Use Tempera water color paint in reds and yellows, and stipple lightly. If you don't fancy the result you merely wipe it off with a damp tissue and there's no harm done. To darken portions of the surface—spill railroad color thinner on it, but don't brush or wipe while wet or you'll have a smear.

Now to the other end (Figure 2) which has 3 window openings above and 2 arches below. Cutting the arches was no problem, but the decorative arched brickwork and concrete shapes called for a little thought. I finally decided to use construction paper painted to match the brick as nearly as possible, then painting in the concrete shapes at each end and in the middle and cementing the whole strip to the tops of the arches. The mortar lines may be drawn in with pen and white ink. This way, if you mess up something you can start over on another piece of paper. Matching brick color isn't easy and I'll admit I've never been able to do it consistently. I mix caboose red with a touch of yellow, then darken with boxcar red or lighten with more yellow or a touch of white.

The raw edges of the brick sheet must be painted brick color and the mortar lines drawn in. Its also possible to cut your corners at a 45° angle to eliminate those raw corner edges entirely. Cut them square first, and then sand them down carefully, to the desired angle.

Turn to Figure 3. This side wall is 34½' high by 49' long and fits inside the end walls. It, too, will have to be pieced and here I decided to use an inner reinforcing wall of 1/16" balsa, the grain of this running vertically. This, cemented to the brick, will give additional strength at the archway where it is needed. With the thicker wall you can case your windows with 1/32" x ⅛" stripwood. I covered the top of the archway as described in the previous paragraph, but brought a trim down each side of the opening. Only four windows to contend with here, the bricked-up ones are merely outlined and having ledges installed below. There are two shipping and receiving door openings, each 4' x 7½' at a height of 4'. The brick platform has a scribed top, and is 5' wide by 16' long exclusive of steps. Brick scraps can be used here. A board along the top edge plus Kemtron nuts and bolts complete it.

An opposite wall is called for, a partial view of which you get in Figure 4. Not one to waste brick where brick is not seen, I used 1/16" balsa, 34½' x 49' for the inside, to which brick 25½' x 34½' was cemented as may be seen in the kit photograph. Two windows, a 5' x 7' door opening, and an archway completes this side.

But now that the main wing is ready for assembly I would strongly advise running some ⅛" balsa strips vertically at the corners of each end so as to have something more tangible to which to cement the sides, and to keep them in line. When assembled you may still need some trianguler corner braces of balsa to assure that it will stand true and square.

Assuming you have now assembled the wing, take a look at the arched end in the kit photograph and you will see an inner wall, platform and door opening. Make this wall the full width of the inside or 28' wide by 15' high with a 7' x 7' door opening set 4' up with a 4' wide platform which may be built all the way across or, as in my case, 20' long because that happened to be the length of a brick scrap I had. The wall should be set back 3' from the edge of the through archway or enough so that the reefers will clear the loading platform.

Check Figure 4 and cut out the end of the 2-story wing, piecing at the top as it is 23' wide by 30' high. Add brick or balsa backing to a depth of 5' from the top. 3 windows and a doorway here with a simulated concrete doorstep and an A type shelter over the door. Figures 1 and 2 show the two sides of this wing which fit inside the end wall. They measure

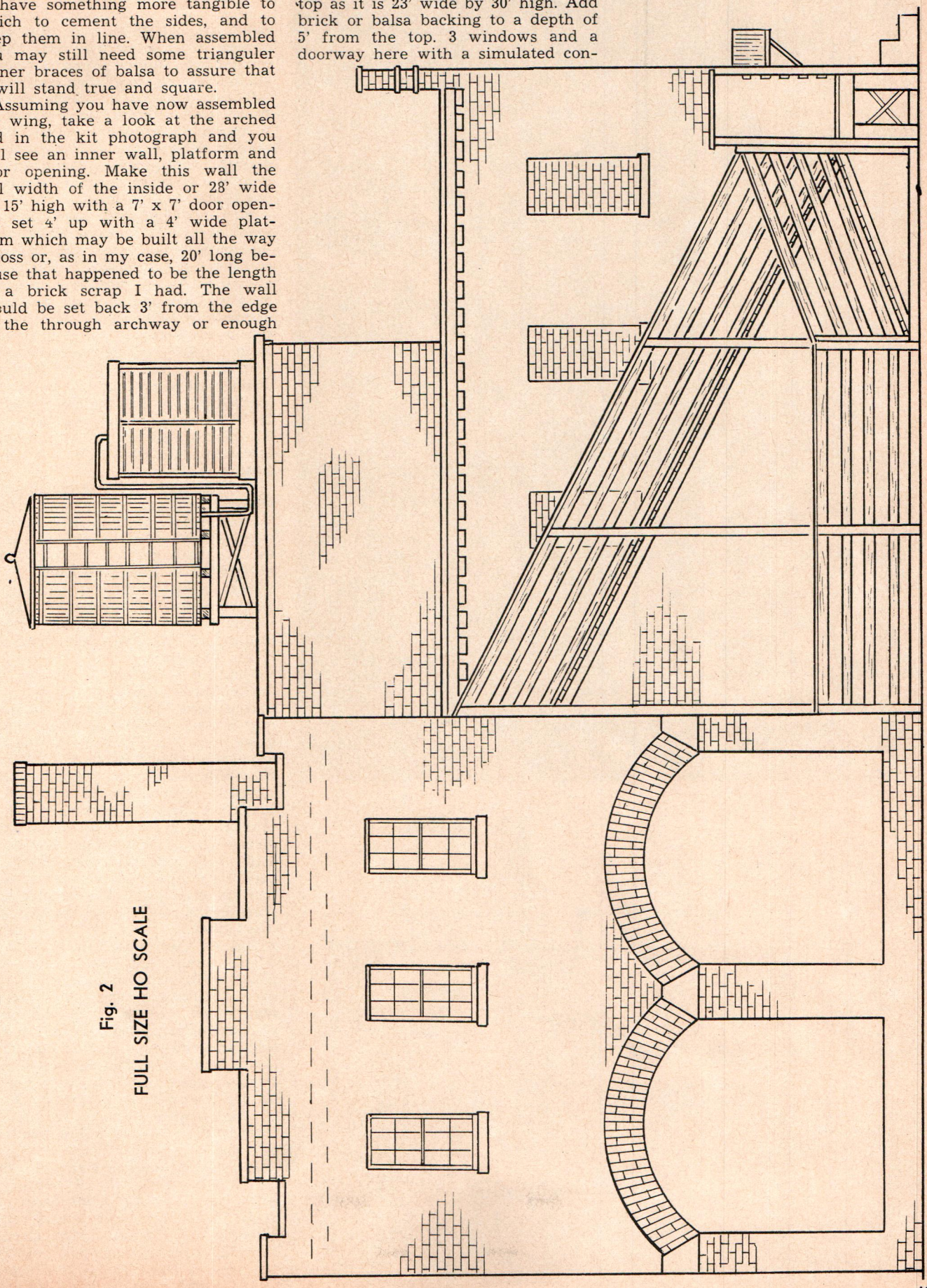
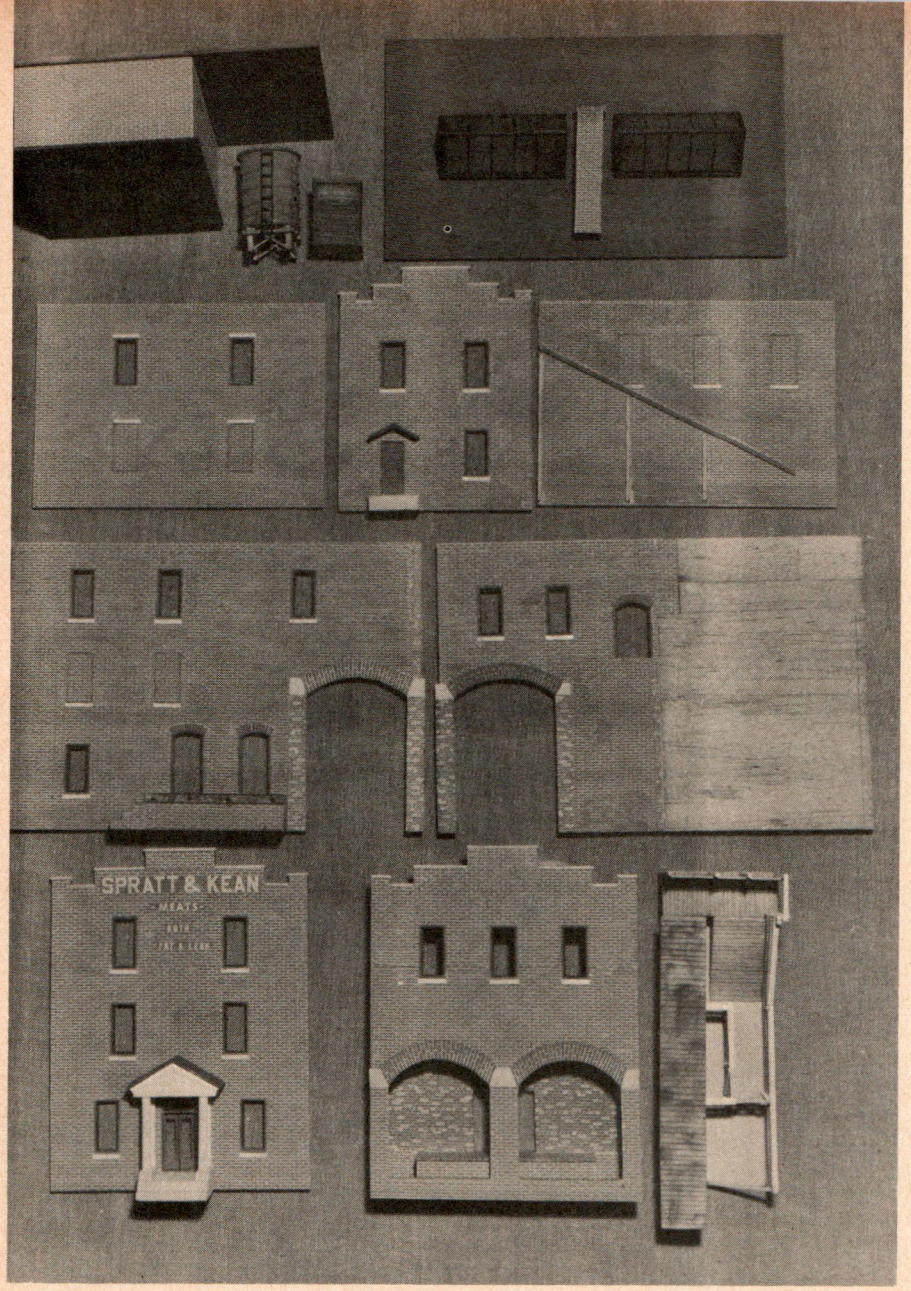
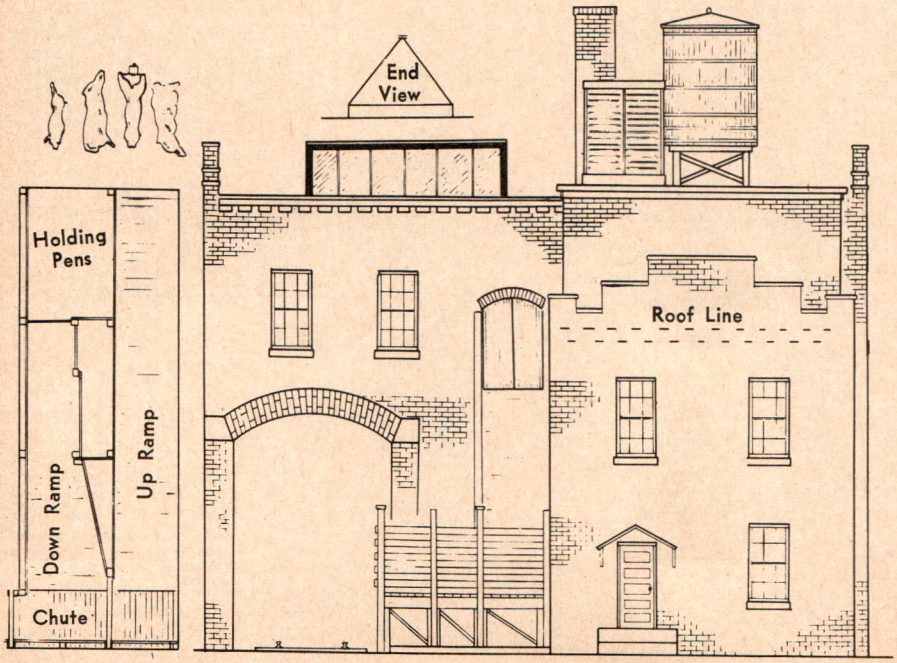


Fig. 2
FULL SIZE HO SCALE



These are the parts which you have to make before final assembly is started. Modeler can choose from wide choice of materials: wood, styrene, Strathmore board, brick paper, or any combination. Lettering is decal.



34½' long by 25½' high, the width of your brick sheet. One side has all bricked-up windows and the other has the second floor windows bricked up and windows openings at first floor level. Before assembling this to the main wing it is again advisable to cement vertical strips to the corners. Note this wing is not set even with the front of the main structure, but is set back one foot.

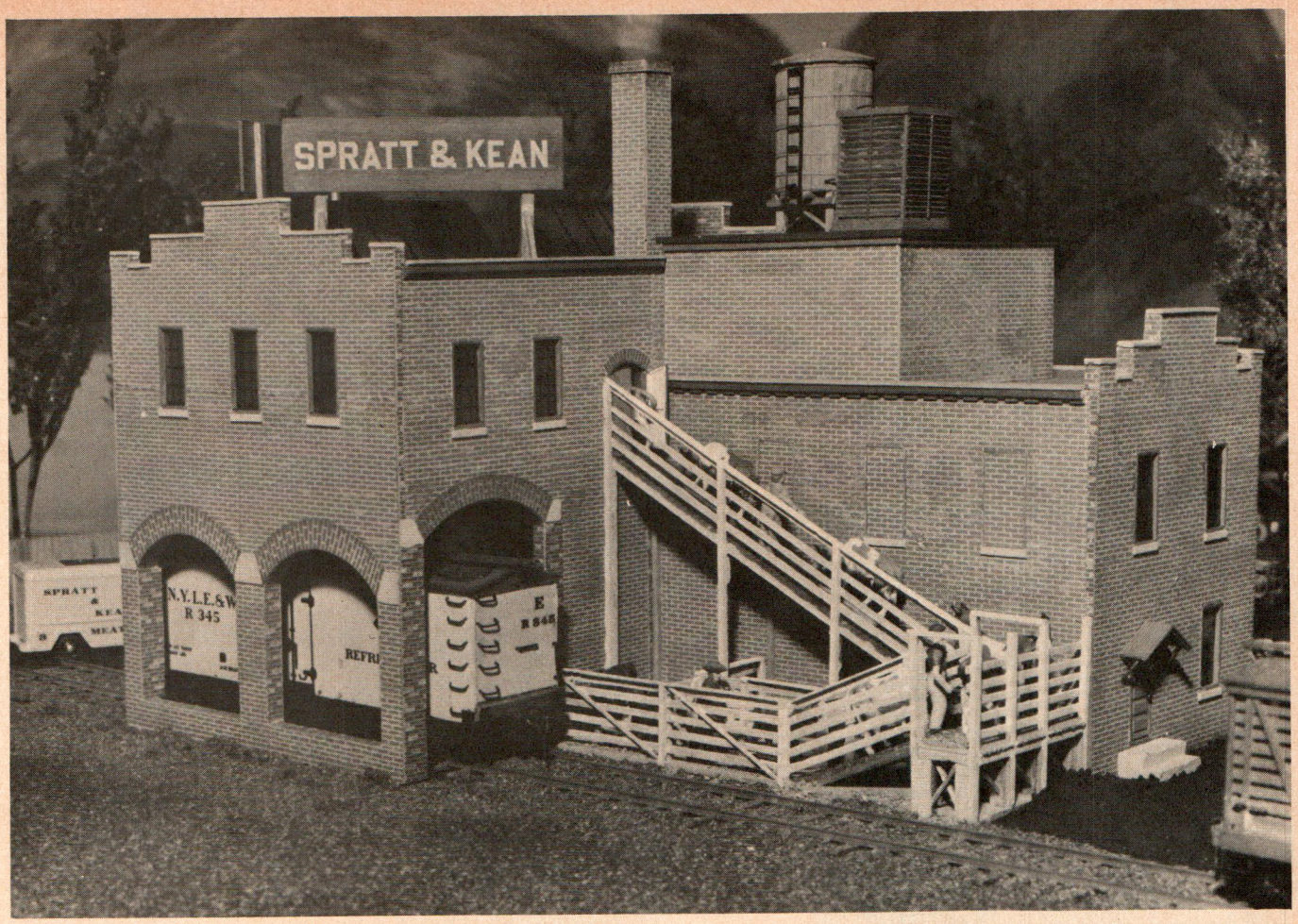
With the building assembled, cement some ⅛" square balsa strips horizontally inside of both wings to serve as roof supports, being guided by the roof line as shown by dashes in the drawings. I used ⅛" balsa in making both roofs, painting the tops black and did not cement them down. A 20' x 21' refrigerating room with 10½' brick walls (corners mitered) was built and cemented atop the 2-story roof. This has a roof of 1/16" balsa, overhanging each side 6" and painted black, with a fascia board beneath of .020 x 1/16" green sides.

We can now add the cornice trim which is nothing more than 1/32" x ⅛" stripwood, notched half its width every scale foot with 6" wide notches, then having a 1/32" x 1/16" piece of stripwood cemented over it, the whole being painted a dark green and cemented to the upper edge of the wall with a simulated concrete capping of 1/32" balsa cemented atop it and the wall.

Figure 4 shows one of the two skylights. These each have a base of ⅛" square balsa—two pieces 13' long and two 8' long, cemented into a rectangular base 8' x 15'. The slanting tops are strips of acetate 6' x 14½' with markings made with pen and ink to simulate border and divisions, then cemented into position like an A tent on the base, and with triangular ends of 1/32" balsa added. Stripwood 1/16" wide was cemented along the peak or ridge and all wood parts were painted black. I cut rectangular holes in the roof and set the skylights over them so that if the building is lighted they will transmit light.

The water tank was made with 1/32" balsa, dampened and wrapped over a carboard core, then scribed with ruler and pencil. Bands were of construction paper, painted a rust color and cemented around tank after it was weathered. The top was shaped from a piece of ⅛" balsa with a pearl headed pen set at the peak. A bit of ladder stock was added to the front and it sets on a low platform of balsa.

The cooling unit is 6'x6'x8½" high and has a solid core of balsa, 5½' x 5½' set on a 3/32" thick balsa base about 6¼' spuare with a 1/16" thick balsa top of the same size. Corners of 1/32" square stripwood complete the framework; .020 x 1/16" strip-



A Judas goat leads the unsuspecting steers up a ramp for slaughtering. Slaughter house such as this provides the railroad with need for refrigerator and stock cars in quantity.

wood slats were cemented against the core, slanting upward and outward. Finally, a very thin sliver of balsa made the vertical division lines in the middle of each side. It was weathered in shades of gray and raw sienna.

The chimney is 3' square, 16' high with mitered corners and is topped with 1/32" x 1/16" stripwood. When cemented to the roof it makes a convenient handle when removing the topside.

Then there are the two portable signs; each sign board is of 1/32" balsa, 5' x 20' painted with several coats of red and having white decals of ¼" Bold Gothic. These boards are set on standards to a height of 11'.

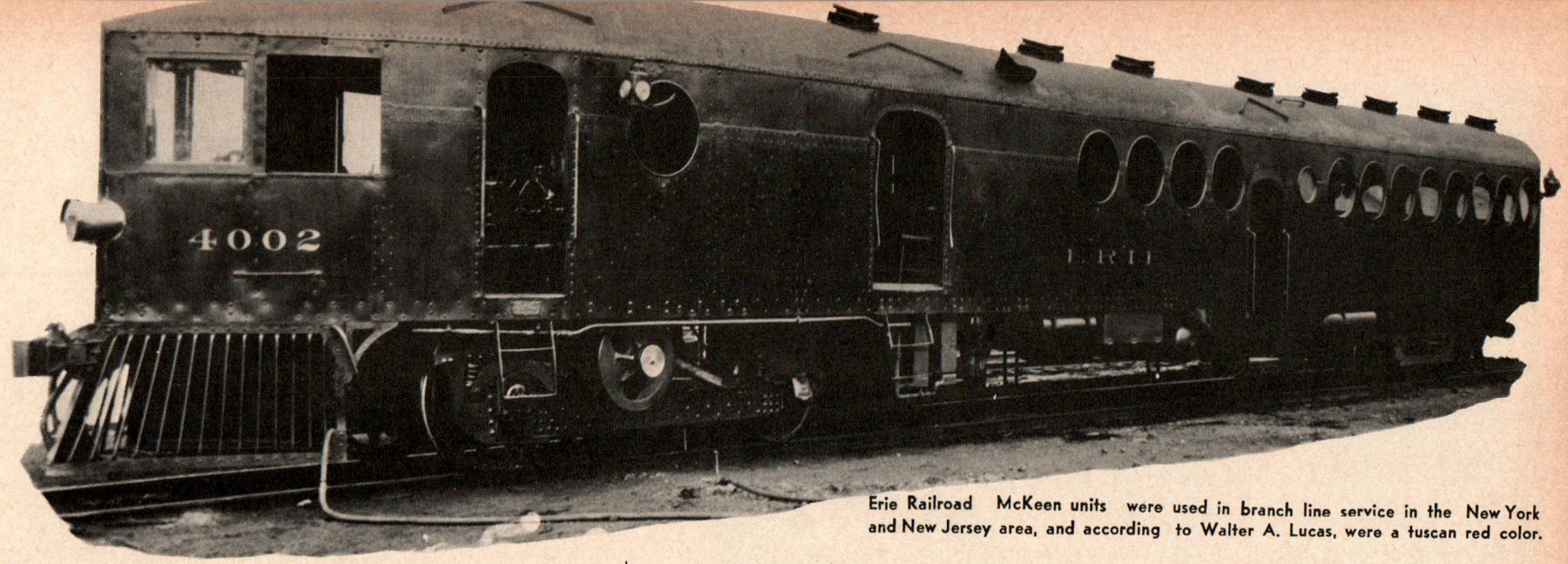
Now to the holding pens and ramp. Figure 4 shows most of the details while Figure 2 provides a view of the outside fence and ramp. We need a piece of sheetwood 1/16" thick and 12' x 35' which serves as the concrete base that fits in the corner of the building . . . don't cement in place yet. Begining with the platform at the end, which is 5' x 13' and stands 4' above the concrete base, set 12" x 12" balsa (⅛" sq.) pilings in place to support platform which is of 3/32" thick balsa overlaid with 1/32" scribed balsa. 6" x 6" balsa posts are set into notches along the platform side and extend to a height of 11'. Build up the side of the chute with stripwood to the height shown. Build a down ramp 10' long, then set 5½' posts into notches along the side of the concrete base, and add the outside fence. Make the pen divisions and simulated gates. Now cement the whole project into the corner. Build the long ramp which is 33¼' x 5', of 1/16" balsa with an overlay of 1/32" scribed balsa. Cement this in place and add the tall posts which extend up to a height to which the up-going fence may be fastened. As a final touch I laid a flat board along the top of each fence. Give everything a coat of whitewash, or thinned white, so as to satisfy the sanitation inspectors. Then scatter a little fine sawdust in pens and on ramps.

In making up the windows I laid them out in four rows, each with five units, with all the details drawn in with pencil on white card stock. Over this I laid the window material, taping it down, and with steel pen and drawing ink drew in the windows. The same applied to the skylights. However, this time I did not use ordinary acetate, but a frosted acetate which transmits light but not details. Unlike the regular type which needs to be rubbed with punice stone powder or kitchen cleanser to give it tooth, this has a built in tooth and takes ink as though it were made for it.

In making the night photograph, which shows the gala opening of the plant back in the twenties, I used series, removing the top floor so 3 grain-of-wheat bulbs wired in that light would reach the skylights. Two other such bulbs, in a series, were used in reflectors outside to light up the front of the building. An exposure of 15 minutes was given at f:32 using Royal Pan cut film in a Speed Graphic.

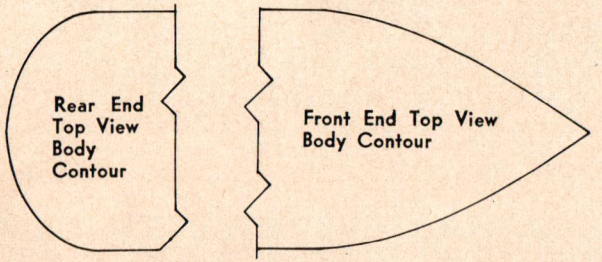
Detailing the main wing calls for a top floor of two levels. 24' of the front portion has a floor of 1/16" balsa at a 23' level. Since the door which opens onto the ramp is only 20' high (23' would have made the ramp too steep) I added a short inside ramp extension bringing it up to a 21' level at which height the balance of the floor is laid. These floors are merely laid on supports so they may be removed at will. Holding pens may be built at rear, tables constructed and an overhead track put up on which carcasses are hung. Carcasses may be made of balsa or stripwood, or bought, or molded into shape using Testor's Contour Putty for Wood Models, then filed and painted—using the drawings in Figure 4 as a guide. Delivery trucks will depend on the era modeled.

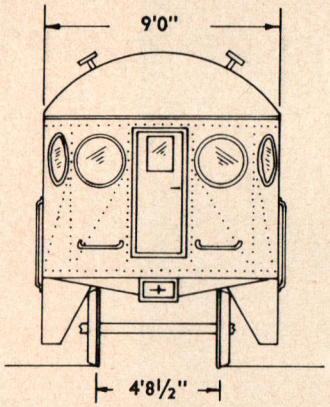
And that just about takes care of Spratt & Kean — Meats — Both fat and lean.

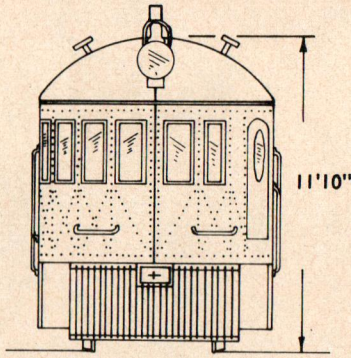


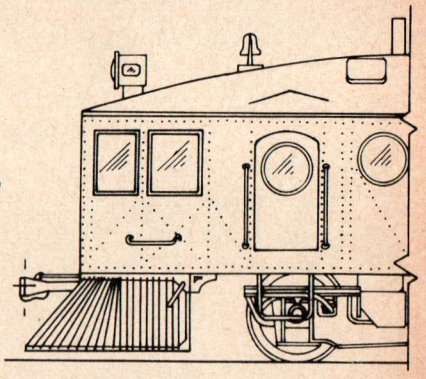
Erie Railroad McKeen units were used in branch line service in the New York and New Jersey area, and according to Walter A. Lucas, were a tuscan red color.

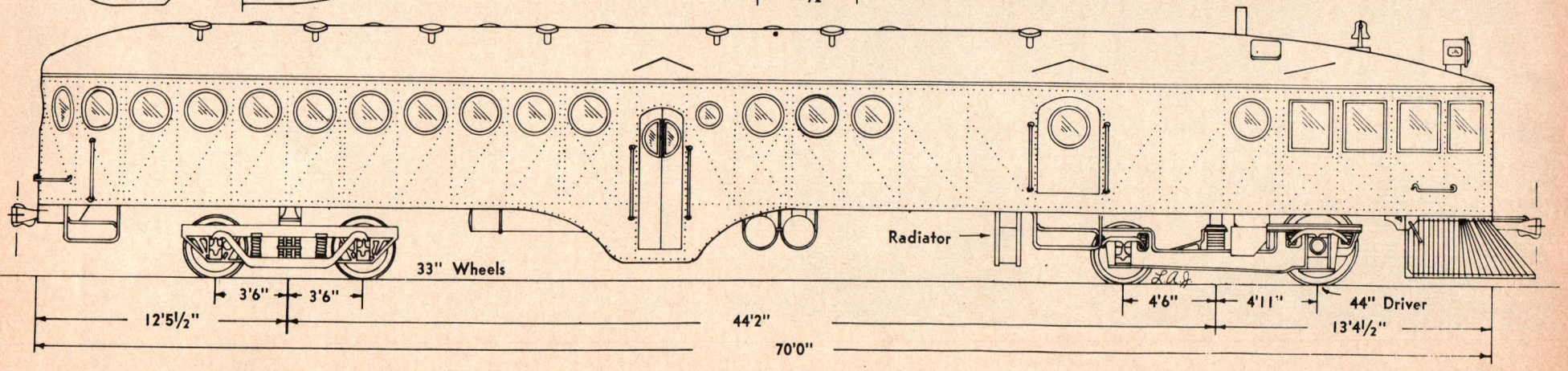
McKEEN MOTOR CAR COMPANY
70 FT. MOTOR CAR











Among the early gasoline railcar manufacturers was the McKeen Motor Car Company. Master mechanic William R. McKeen, Jr., designed the McKeen car to supplant electric cars on lightly traveled lines and his cars subsequently saved many steam branch lines from early abandonment. A Union Pacific employee, McKeen's first units went solely to that road, and the McKeen plant was located in former Union Pacific shops at Omaha, Nebraska. Subsequent cars went to the Southern Pacific, Northern Pacific, Chicago Great Western, Pennsylvania, Rock Island, Illinois Central, Erie, plus a number of smaller roads.

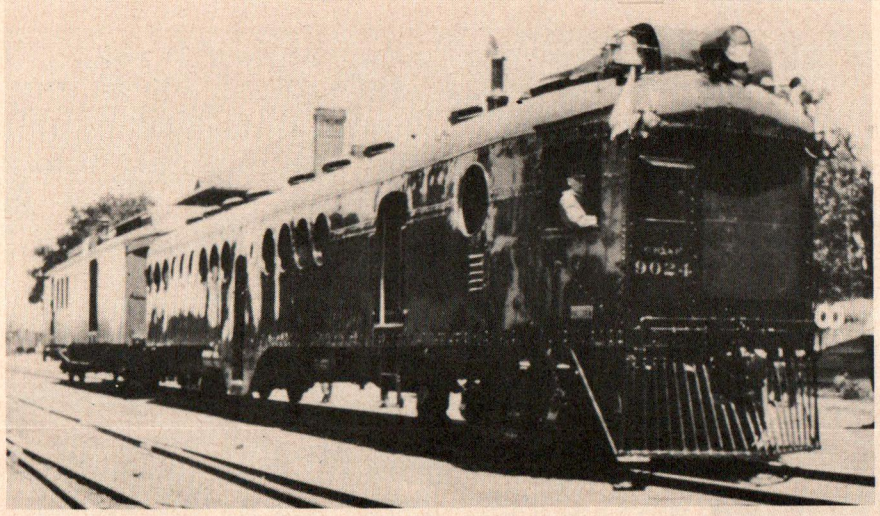
The characteristic wedge shaped front and porthole windows were established quite early in the design though some units had more conventional single arch windows and a parabolic shaped front end.

The units were powered by a gasoline engine which had to be reversed to reverse the car. Top speed was about 50 mph. The cars were illumiated with acetylene gas with some early units having a gasoline pressure lighting system. Many were later converted to electricity. With cooling coils mounted under the floor, the units, tended to freeze easily when stored outside in cold weather, and were often kept in heated roundhouses or shop buildings.

Lack of great power plus imperfections in the early gasoline engine and clutch prevented these units from achieving any great popularity. The firm built somewhat over 150 units all told.

Through the years, many units were gradually revamped. Rock Island removed five feet from the noses of their four McKeen cars and converted the units to gas-electric drive. The Chicago Great Western rebuilt three of their McKeen cars into the sleek "Blue Bird", with sleeper, lounge, buffet, and coach sections.

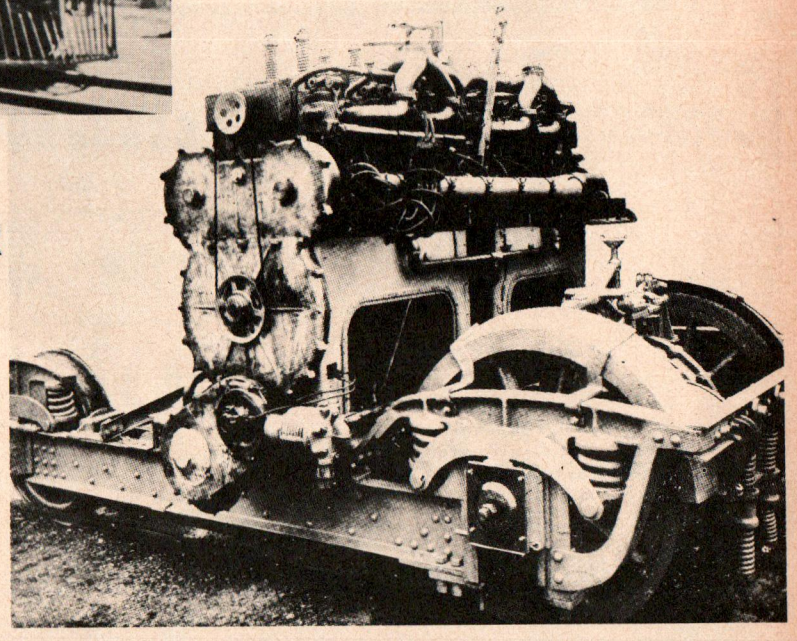
The rugged all steel bodies sometimes lasted beyond their time. Two bodies ended up at Oelwein, Iowa, as yard offices on the CGW.



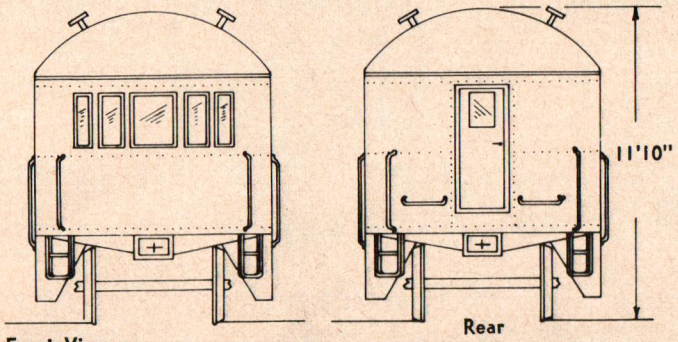
Rock Island cut five feet off the nose of their four McKeens and installed a new gas-electric drive. Rebuilt units hauled trailer.

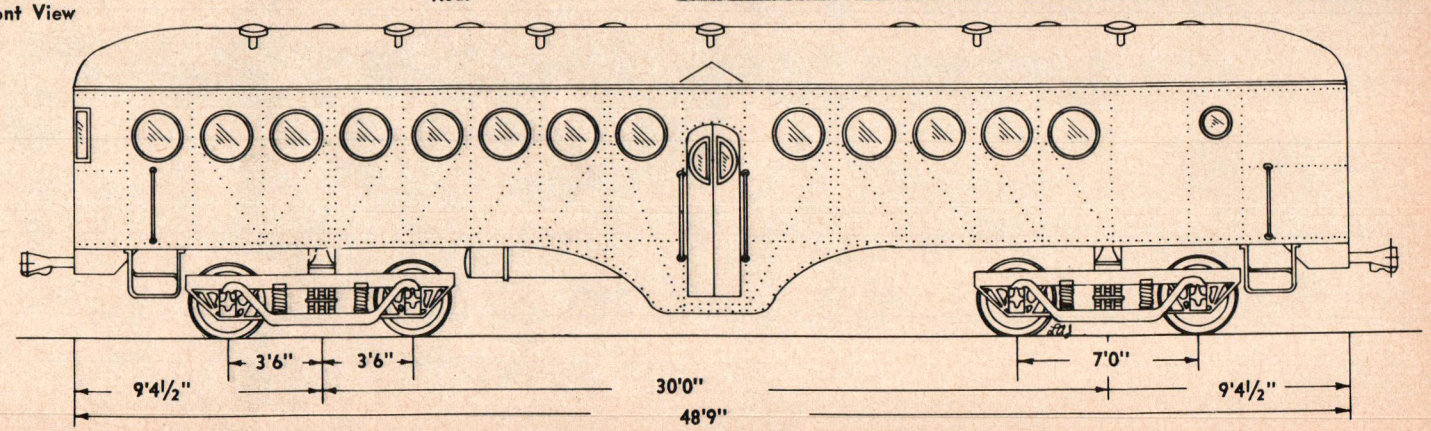
Between 1905 and 1920, the McKeen Motor Car Company of Omaha turned out over 150 gasoline powered motor cars whose design foreshadowed the streamlined era of the 1930 and 1940 period.

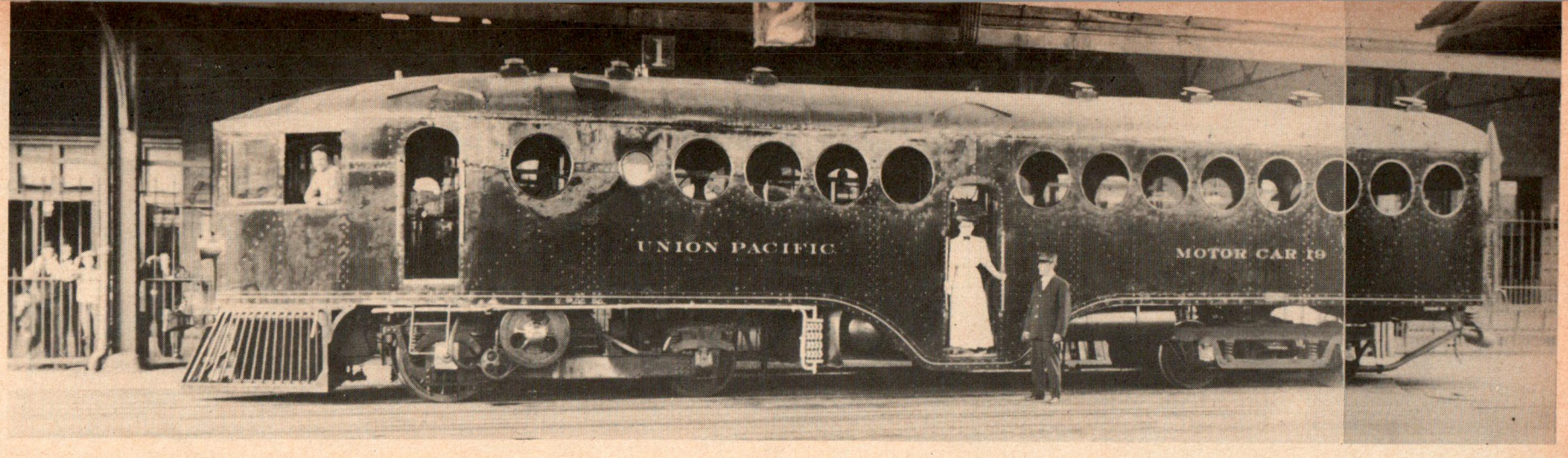
The gasoline motor swung with the truck. To reverse car, motor had to be reversed. Photo from 1913 catalog shows early riveted frame, replaced with cast frame on later production.



McKEEN 48 FT. COACH TRAILER

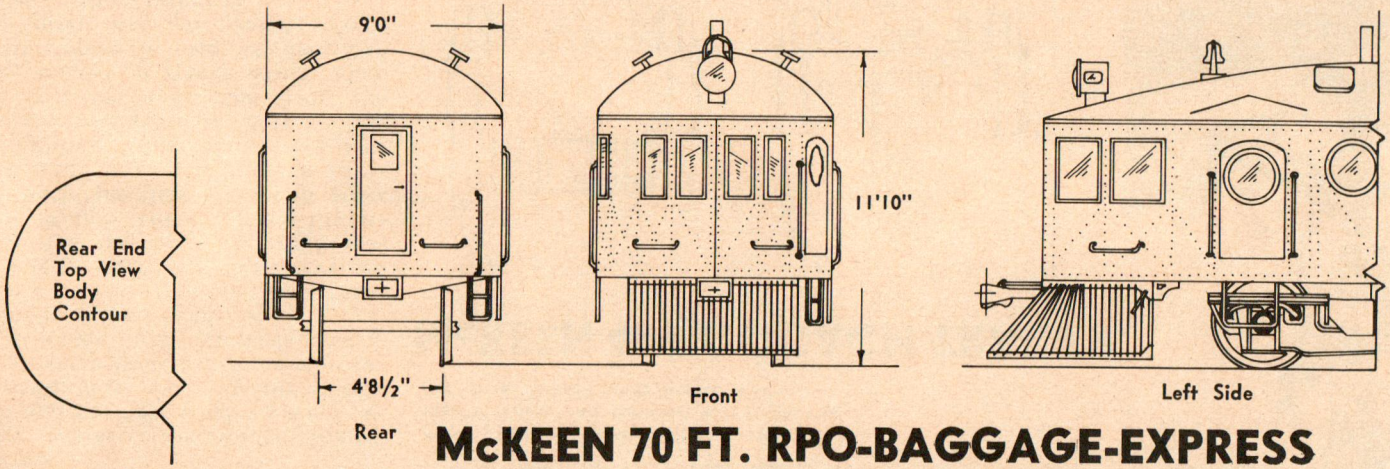


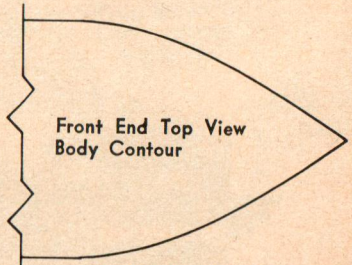




Official Union Pacific photo shows exhaust pipe running to rear. Car shown is a 55 ft. unit.

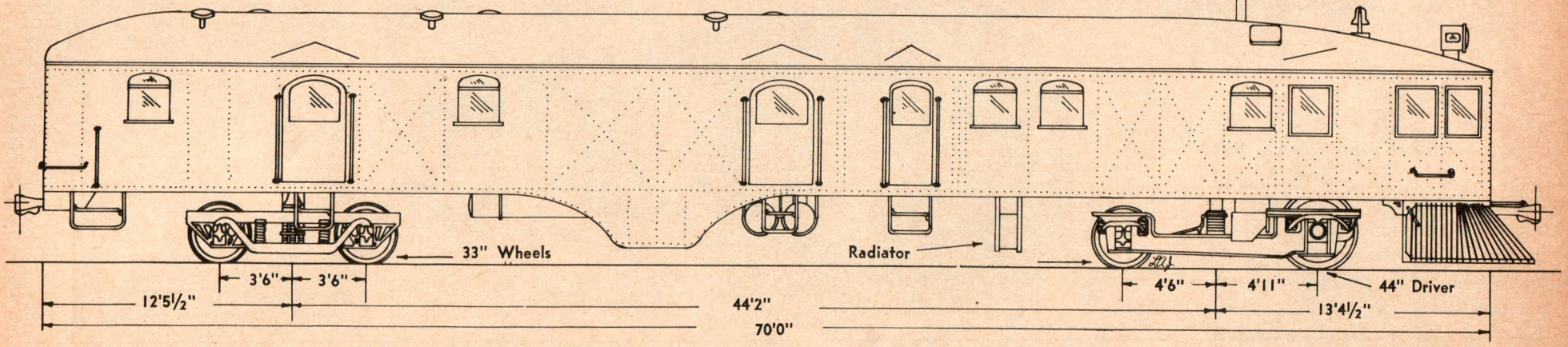
Photostats may be made to other scales for your own personal convenience. Railroad Model Craftsman retains all other reproduction rights.

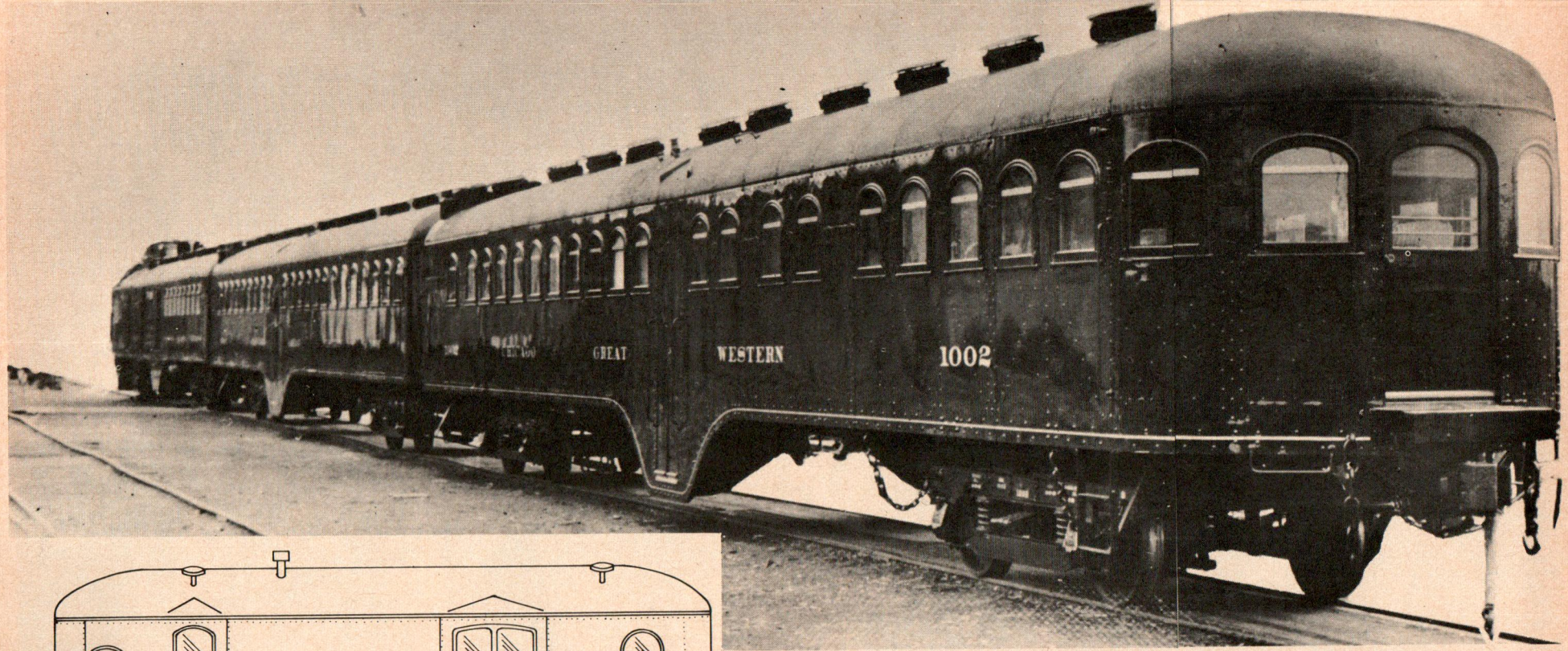




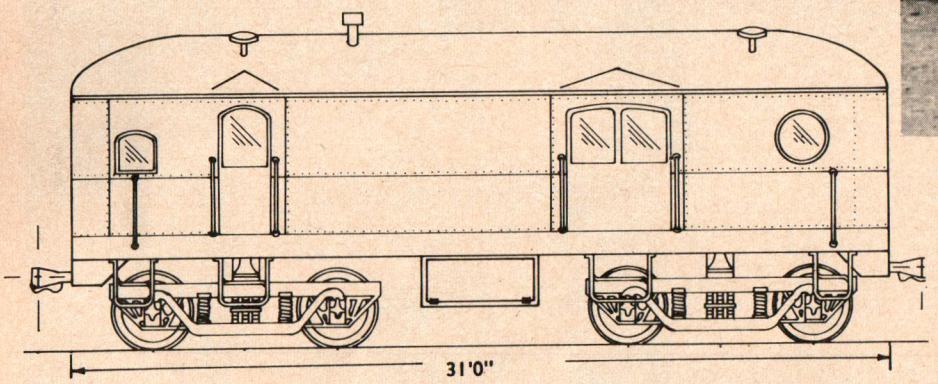
A—Window has horizontal bars.
B—Windows have vertical bars.

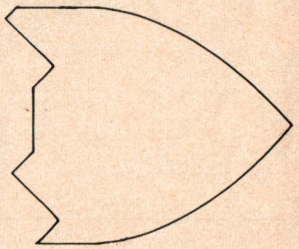
McKEEN 70 FT. RPO-BAGGAGE-EXPRESS



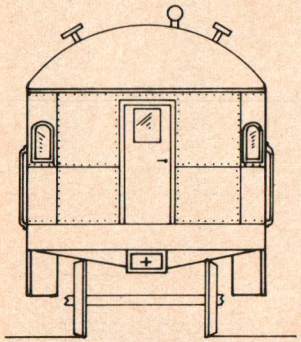


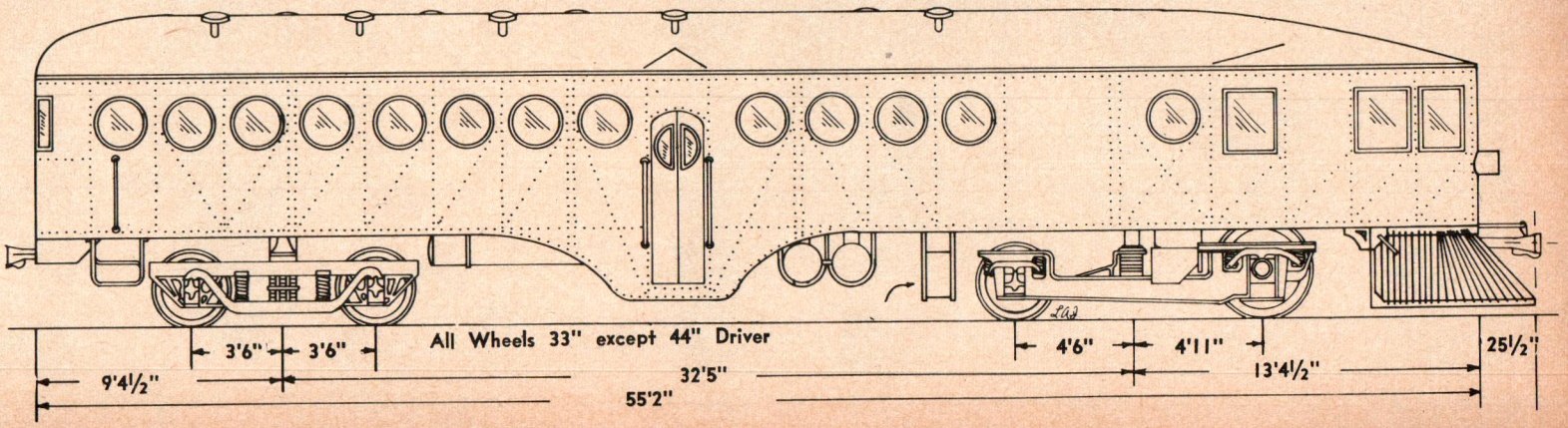
The Chicago Great Western rebuilt three of their McKeen cars into the "Blue Bird". Two trailers included sleeper lounge, buffet, and coach sections. The motor unit was later rebuilt as a switcher, serving Winona, Minn.





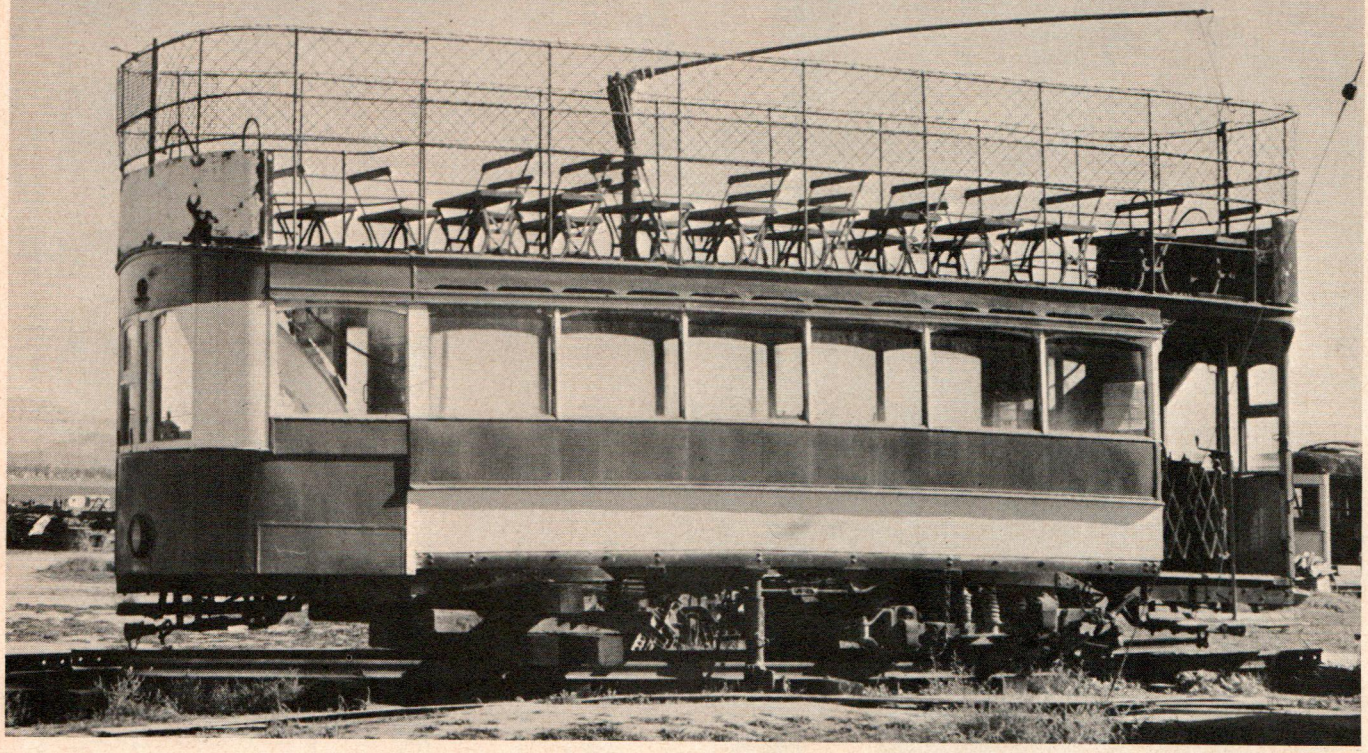
McKEEN 55 FT. MOTOR CAR





TRAILER

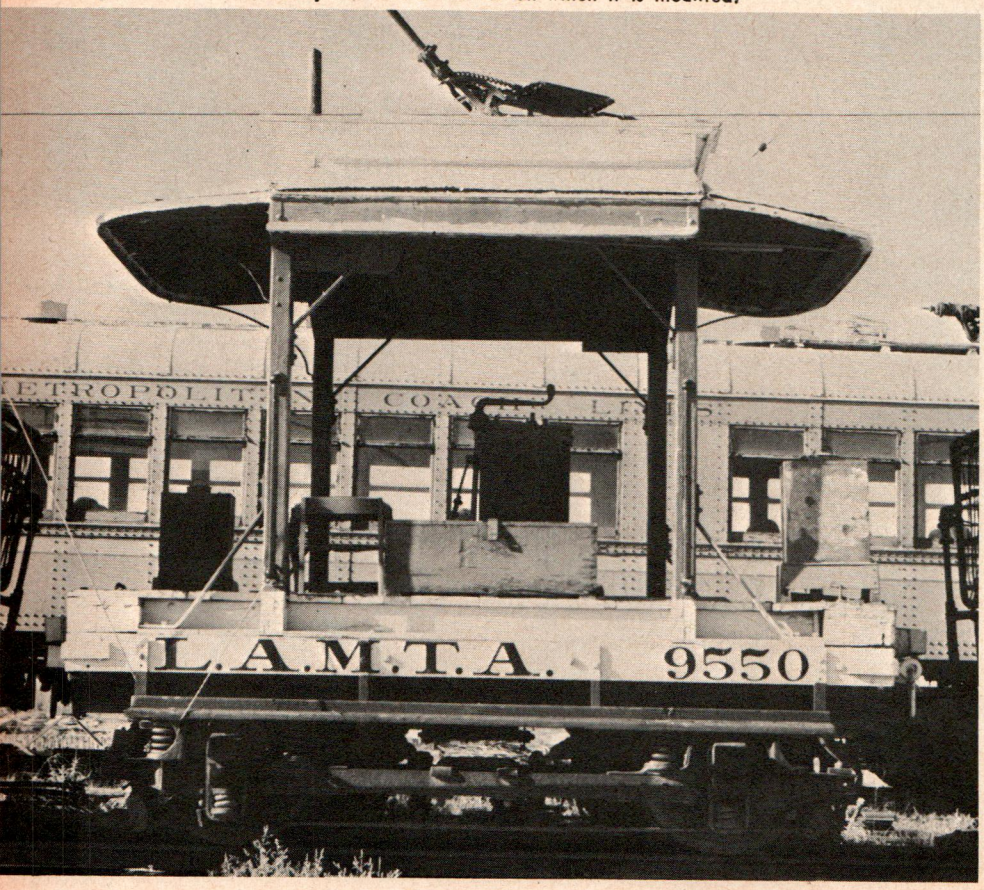
Orange Empire Trolley Museum



Coras, Iompair Eireann No. 2, a blue and white double deck tram car from Dublin, built by Brush in 1901, has been converted from 5'3" gauge to standard and is now fully restored, far from home.

Largest collection of electric railway equipment in the west is the Orange Empire Museum collection at Perris, California, 70 miles from Los Angeles.

Los Angeles Railway shop switcher 9550 in later LAMTA garb built by LARY in 1904, barely fits Brill 21E truck on which it is mounted.

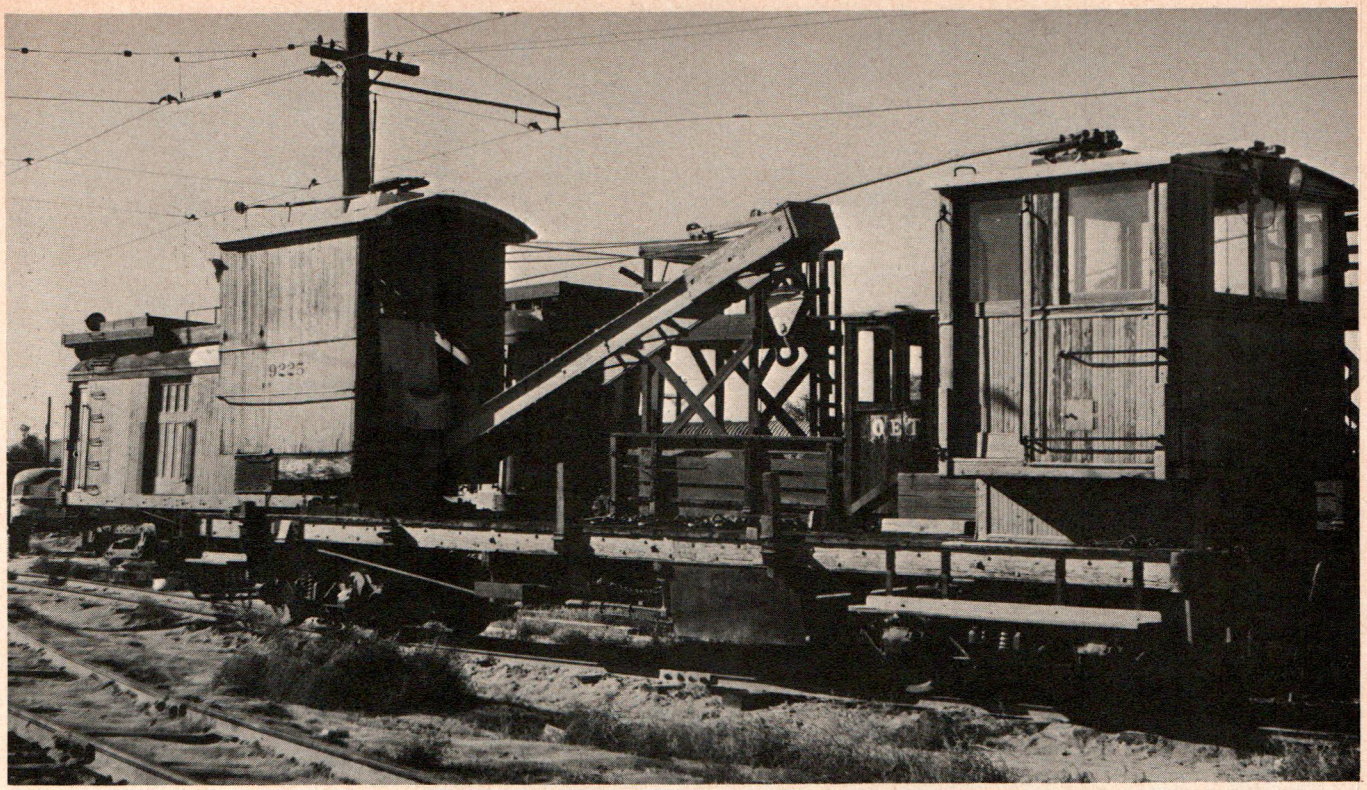


One of the outstanding collections of electric railway equipment in North America, and the largest operating museum collection in the west is that of the Orange Empire Trolley Museum, at Perris, California; about 80 miles southeast of Los Angeles.

Orange Empire has evolved past the first rough stages of museum establishment and now offers regular weekend operation. In addition to standard gauge trackage, much of the line is dual gauged to permit operation of the more than twenty Los Angeles Railway 42 inch gauge cars. A two track car shop is now under construction which will have pit facilities for equipment of both gauges. Also on the property for future installation is a transfer table to facilitate servicing.

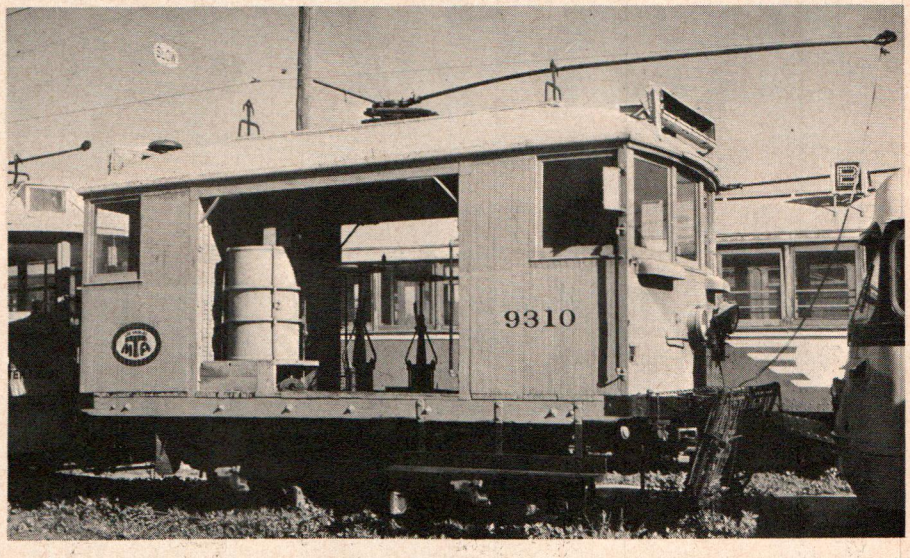
Unlike the eastern trolley museums which have had to battle severe snow and rain conditions necessitating use of protective tarpaulins and priority to carbarns, the Perris operation is blessed with the dry, mild climate of southern California, greatly reducing maintenance problems. Yard construction is receiving priority so as to clear the reverse loop of stored cars. The museum hopes eventually to run cars into the City of Perris over one time Santa Fe right-of-way.

Equipment on the museum is largely from onetime California systems,

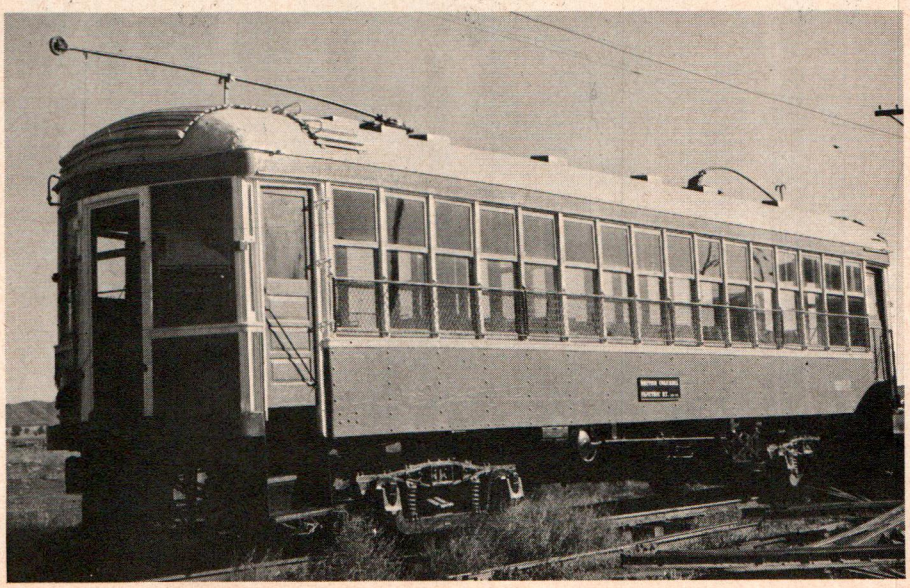


ABOVE: LARY 9225 Derrick has 5-ton capacity, was built in 1912 and measures 40' in length. Unit is useful in track laying, heavy work.

LAMTA Rail Grinder 9310 in Yellow and green, built by LARY in 1925 on a Brill truck. All LARY cars were 42" gauge. Plans for 9310 are found in RMC TRACTION PLANBOOK for HO scale.



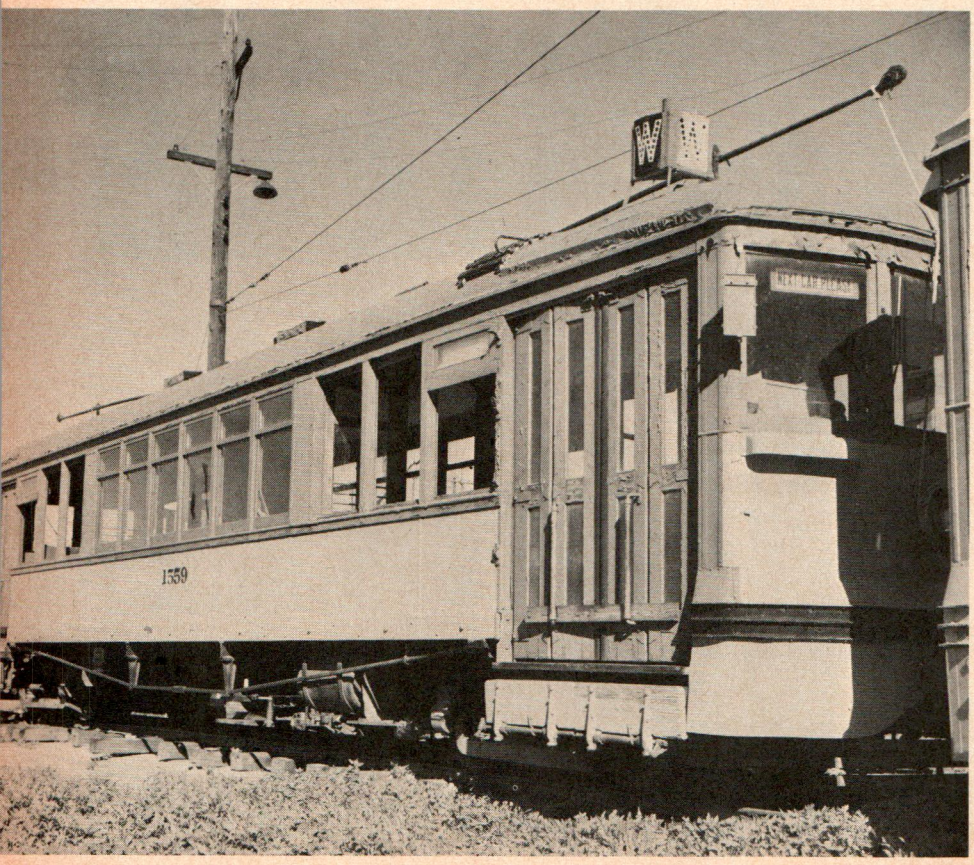
ABOVE: Orange Electric Museum has one of the two known remaining Fresno Traction Company cars. No. 83 was found without trucks and is receiving a virutally complete rebuilding. Car was built in 1925 by St. Louis, is DT AR.



RIGHT —British Columbia Electric interurban No. 1225 built by St. Louis in 1913 is mounted on St. Louis 23-ES trucks. Car is red, white trim.

Pacific Electric Tower Car 00157, one of the most important cars on the museum property as right of way is extended, in a handsome wooden specimen 48'2" long weighing 41 tons, and is mounted on Standard C8OP trucks, powered with 4 General Electric 205E motors.

BELOW: Maintenance of rare old cars is one of the major jobs at any museum. OETM member is putting the trim paint on Pacific Electric car.



California K-4 type No. 1559 built by Los Angeles Railway in 1925 has St. Louis M-69 trucks. Museum trackage uses 75 and 90 pound rail.

notably Pacific Electric and Los Angeles Railway. There is also a good sprinkling of other equipment from such lines as Key System, San Diego, New Orleans, Visalia Electric, Northern, and Dublin (Ireland). The roster includes most needed types of work equipment.

A motor vehicle division has also been established and includes such useful vehicles as a Southern Pacific fire engine, a White derrick truck, an old Mack dump truck, and a motorized tower truck which relieves some of the burden from PE Tower Car 00157.

As with all trolley and railroad museums, the Orange Empire could use more good workers for such projects as car maintenance, yard and right-of-way construction, car shop and car barn construction, and a thousand other jobs. Even bus drivers are needed for the growing omnibus fleet.

Visitors will find the more than 60 cars generally well spotted for inspection and photography. The two wide gauge cars have been standard gauged (Dublin, New Orleans). Some of the cars still require mounting on suitable trucks, work that can be handled more easily after the shop is completed. Cars are usually operated for the public on Sunday afternoons.

Visitors might want to write for complete information in advance to: Orange Empire Trolley Museum, Box 501, Perris, California. A stamped addressed envelope should be enclosed. The museum is a non-profit organization. Regular membership is $10 per year, associate membership $2.00 per year.

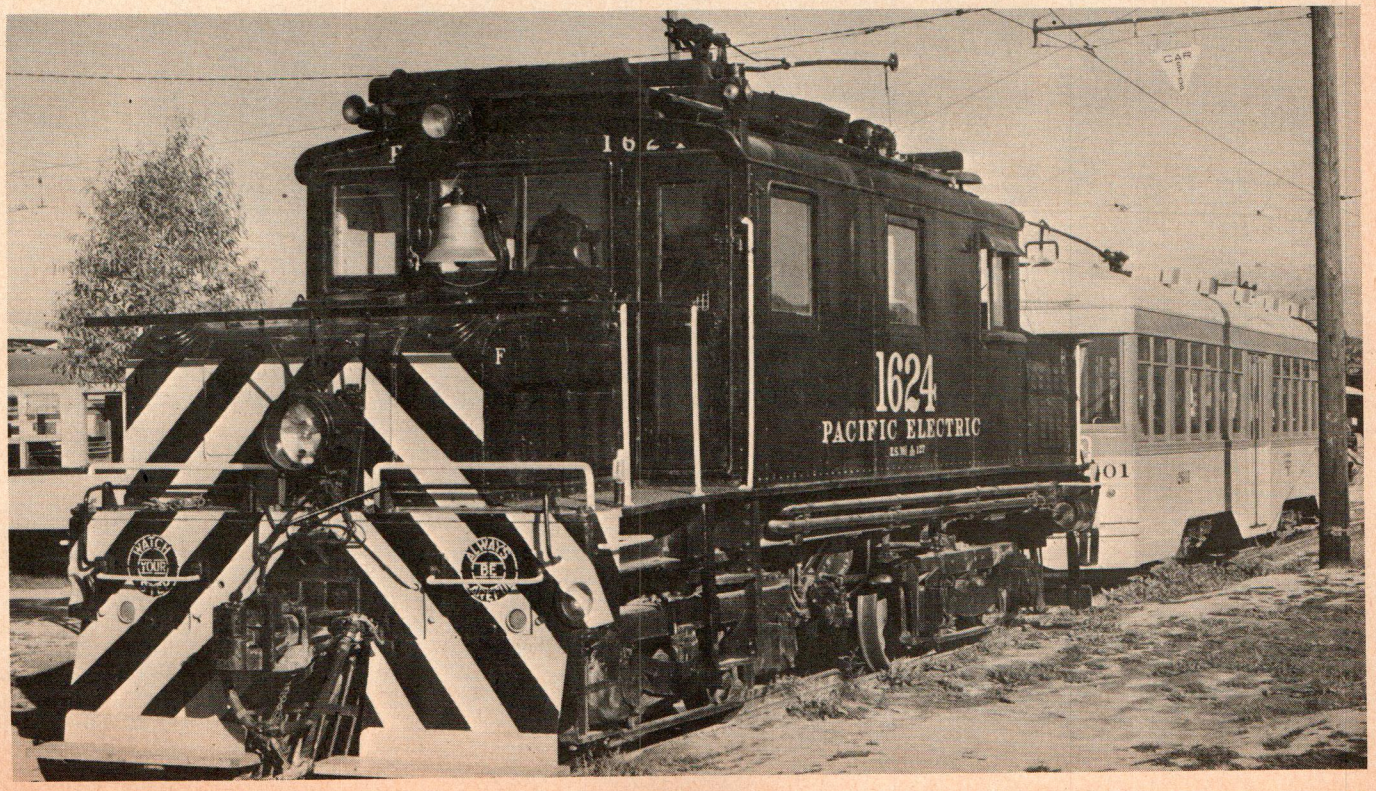
ORANGE EMPIRE TROLLEY MUSEUM — ROSTER OF EQUIPMENT

Number	System	Built	Type
CITY STREETCARS (21)			
2	CIE, DUBLIN, IRELAND	1901	Double-deck, Open-top Tram
4	BAKERSFIELD & KERN ELECTRIC RY.	1900	California
* 83	FRESNO TRACTION CO.	1925	Lightweight Closed
151	LOS ANGELES RAILWAY	1898	Huntington Standard "B"
152	LOS ANGELES RAILWAY	1898	Huntington Standard "B"
162	SAN FRANCISCO MUNICIPAL RY.	1914	Drop Platform Closed "B"
171	SAN FRANCISCO MUNICIPAL RY.	1923	Drop Platform Closed "K"
508	SAN DIEGO ELECTRIC RAILWAY	1936	PCC Streamliner
525	LOS ANGELES RAILWAY	1906	Huntington Standard "BG"
913	NEW ORLEANS PUBLIC SERVICE	1924	Drop Platform Closed
* 1057	LOS ANGELES RAILWAY	1920	Birney Safety Car
1160	LOS ANGELES RAILWAY	1923	California "F"
1201	LOS ANGELES RAILWAY	1921	California "H-4"
1423	LOS ANGELES RAILWAY	1924	Closed "H-3"
1435	LOS ANGELES RAILWAY	1924	Closed "H-3"
1450	LOS ANGELES RAILWAY	1924	Closed "H-3"
1559	LOS ANGELES RAILWAY	1925	California "K-4"
* 2501	LOS ANGELES RAILWAY	1925	Experimental Closed "L"
2601	LOS ANGELES RAILWAY	1930	Experimental Peter Witt "M"
3001	LOS ANGELES RAILWAY	1937	PCC Streamliner "P"
3100	LOS ANGELES RAILWAY	1943	PCC Streamliner "P-2"
SUBURBAN CARS (6)			
167	KEY SYSTEM	1937	Articulated Bridge Unit
538	PACIFIC ELECTRIC RAILWAY	1909	California
5112	PACIFIC ELECTRIC RAILWAY	1922	Center Entrance Closed
5123	PACIFIC ELECTRIC RAILWAY	1922	Center Entrance Closed
5166	PACIFIC ELECTRIC RAILWAY	1925	Center Entrance Closed
5167	PACIFIC ELECTRIC RAILWAY	1925	Center Entrance Closed
INTERURBAN CARS (7)			
* 301	VISALIA ELECTRIC RAILWAY	1908	Semi-convertible Trailer
314	PACIFIC ELECTRIC RAILWAY	1930	Steel Passenger Motor
418	PACIFIC ELECTRIC RAILWAY	1913	Steel Passenger Motor
498	PACIFIC ELECTRIC RAILWAY	1913	Steel Combination
* 1000	PACIFIC ELECTRIC RAILWAY	1914	Wood Officers' Car
1001	PACIFIC ELECTRIC RAILWAY	1914	Wood Passenger Motor
1225	BRITISH COLUMBIA ELECTRIC RY.	1913	Wood-Steel Passenger Motor
MAINTENANCE-OF-WAY CARS (10)			
9209	LOS ANGELES RAILWAY	1913	Power (locomotive) Car
9225	LOS ANGELES RAILWAY	1912	5-ton Derrick
9310	LOS ANGELES RAILWAY	1925	Rail Grinder
9350	LOS ANGELES RAILWAY	1907	Tower Car
9351	LOS ANGELES RAILWAY	1907	Line Construction Car
9550	LOS ANGELES RAILWAY	1904	Shop Switcher
9611	LOS ANGELES RAILWAY	1907	Maintenance-of-way Flat Car
9615	LOS ANGELES RAILWAY	1907	Maintenance-of-way Flat Car
00150	PACIFIC ELECTRIC RAILWAY	1899	Trolley Greaser
00157	PACIFIC ELECTRIC RAILWAY	1915	Tower Car
RAILROAD LOCOMOTIVES, PASSENGER AND FREIGHT CARS (13)			
111	LOS ANGELES TERMINAL RAILWAY	1895	Wood Open End Observation Car
175	SAN DIEGO & ARIZONA EASTERN	1915	Steel Combination
570	SOUTHERN PACIFIC COMPANY	1926	Wood Cupola Caboose
1420	SANTA FE RAILWAY	1905	Wood Cupola Caboose
1624	PACIFIC ELECTRIC RAILWAY	1925	Electric Locomotive
1962	PACIFIC ELECTRIC RAILWAY	1925	Wood Flat Roof Caboose
1970	PACIFIC ELECTRIC RAILWAY	1915	Wood Cupola Caboose
1971	PACIFIC ELECTRIC RAILWAY	1915	Wood Cupola Caboose
1973	PACIFIC ELECTRIC RAILWAY	1906	Wood Cupola Caboose
1985	PACIFIC ELECTRIC RAILWAY	1905	Wood Cupola Caboose
00117	PACIFIC ELECTRIC RAILWAY	1924	Wood-Steel Box Car
00118	PACIFIC ELECTRIC RAILWAY	1924	Wood-Steel Box Car
00119	PACIFIC ELECTRIC RAILWAY	1924	Wood-Steel Box Car

NOTES: *—Indicates cars are bodies only. All Los Angeles Railway cars are 3-ft., 6-in. gauge "B," "K," etc., are types designated by systems operating the cars.

photos by Sharpe Delaney

127,000 lb. Pacific Electric steeplecab juice jack was built in 1925 has four GE-251A traction motors. Diesels replaced electric locos in the Los Angeles area and PE name has been replaced by SP.

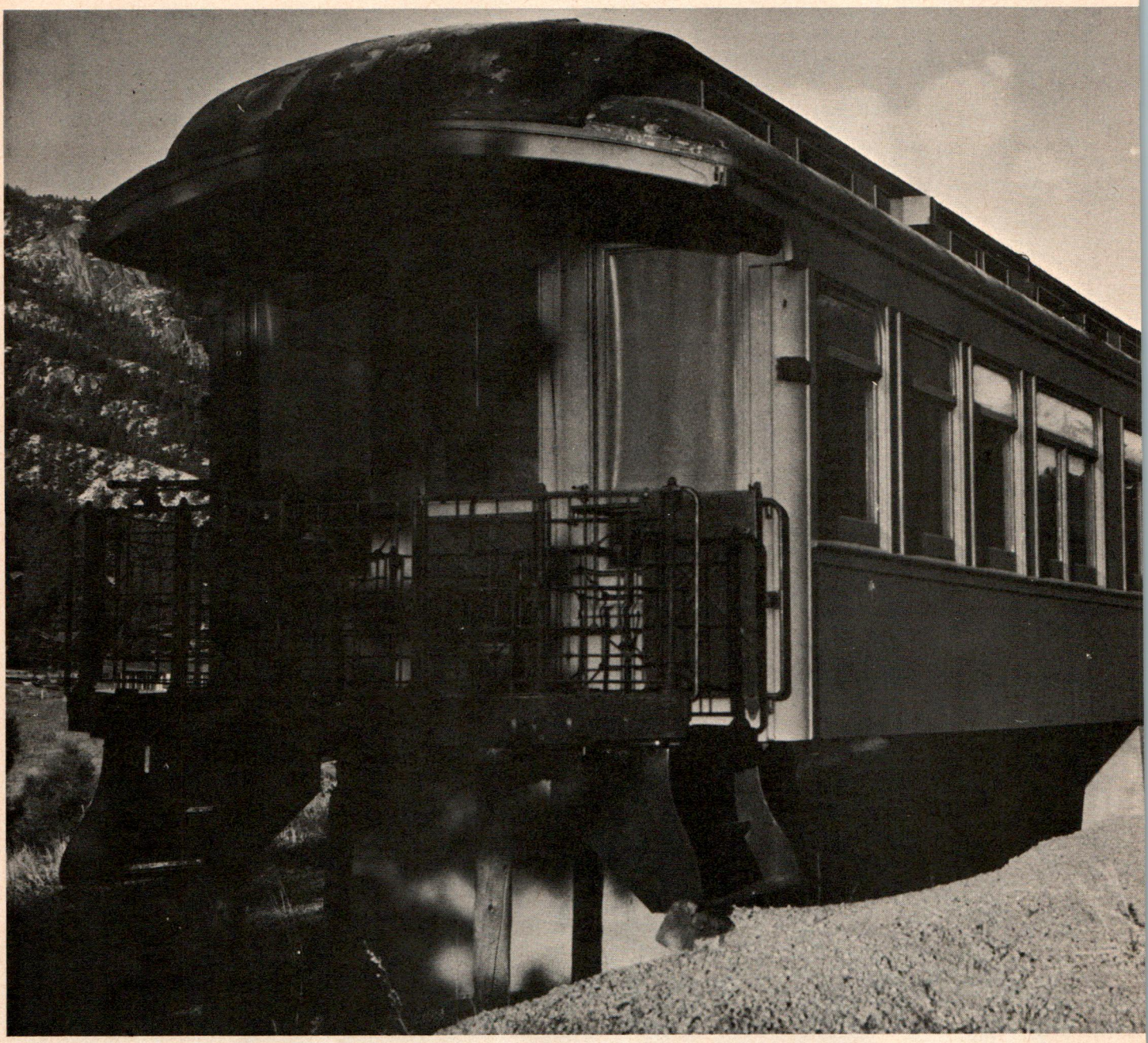


COLORADO MIDLAND RY.

PRIVATE CAR NO. 100

by Russ Porter

Del Gerbaz fine Colorado Midland No. 100, now undergoing restoration, once served as a private car on the Colorado carrier; was built by Pullman in 1898.



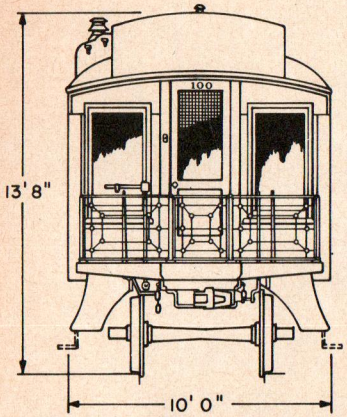
The Cascade as she appeared at Colorado Springs, Colorado, in 1949, when purchased by Del Gerbaz.

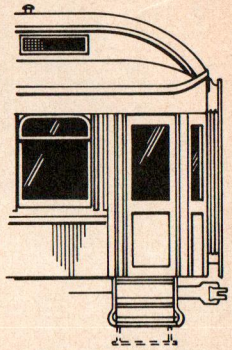
In 1898, the Pullman Palace Car Company built Private Car No. 100 for the Colorado Midland Railway. The beauty of the then new car can well be appreciated by glancing at the exterior and interior photos taken by Pullman Company photographers and reproduced on these pages.

In 1912 the No. 100 was slightly modernized by the Colorado Midland, losing its open platform at the dining end, but retaining almost all other original equipment to the present day.

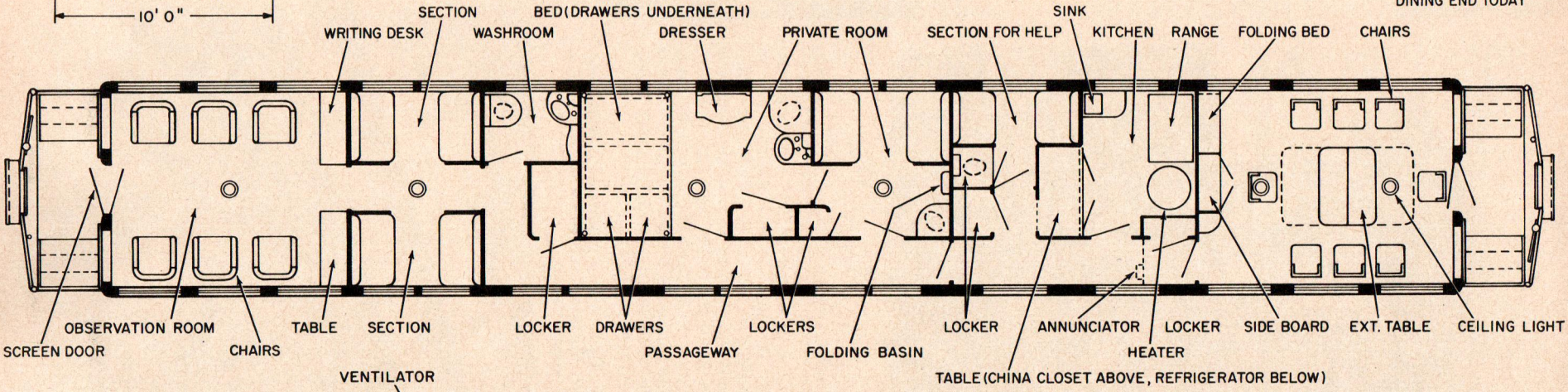
The present owner, Del Gerbaz of La Mesa, Colorado, saw the car sitting on concrete blocks near Colorado Springs, Col., in 1949 and made a quick purchase. In 1953 he moved it 258 miles west via house moving rig to its present location on the D&RGW branch line near Aspen, Colorado. Del then proceeded to build a car shop around the car to protect it from the elements and the ever present threat of vandals. He is now in the process of putting the car on trucks so that it can be operated on the Aspen branch line.

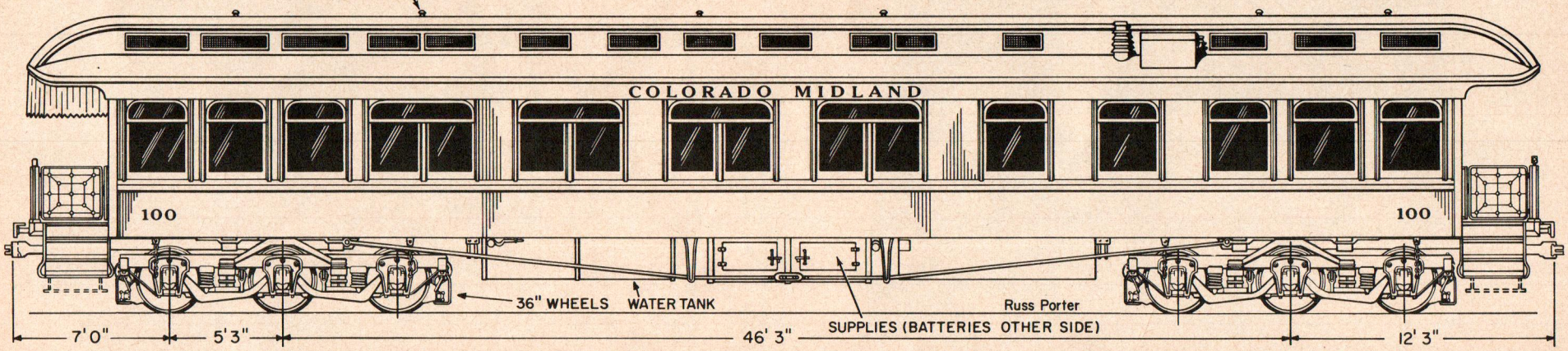
By comparing the floor plan of No. 100 with that of No. 40 of the Elgin, Joliet & Eastern Railway (August 1965 p. 23, RMC) the similarity is quite apparent. The observation ends of both cars are identical, even to the pattern design of the platform railing.



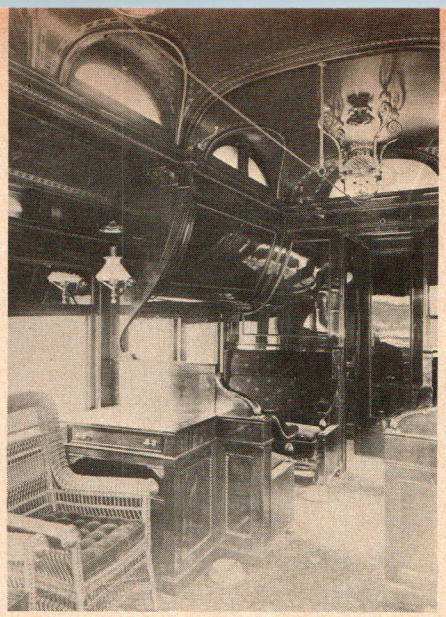


DINING END TODAY



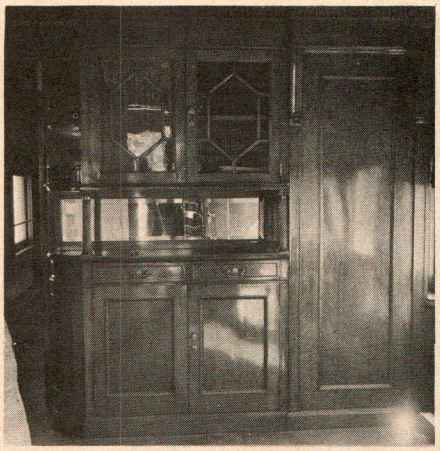


Colorado Midland Ry. private car No. 100, later named Cascade, was sister car to U.P. 100, and EJE Ry. No. 40. Builder photo at Pullman, 1898.



Lounge area of the Cascade as she appeared in an official 1898 Pullman Palace car builder's photo.

Colorado Midland Ry. Cascade, identical to UP 100 and EJ&E 40, except finished in oak. Elegance of interior is obvious in this restoration photo.

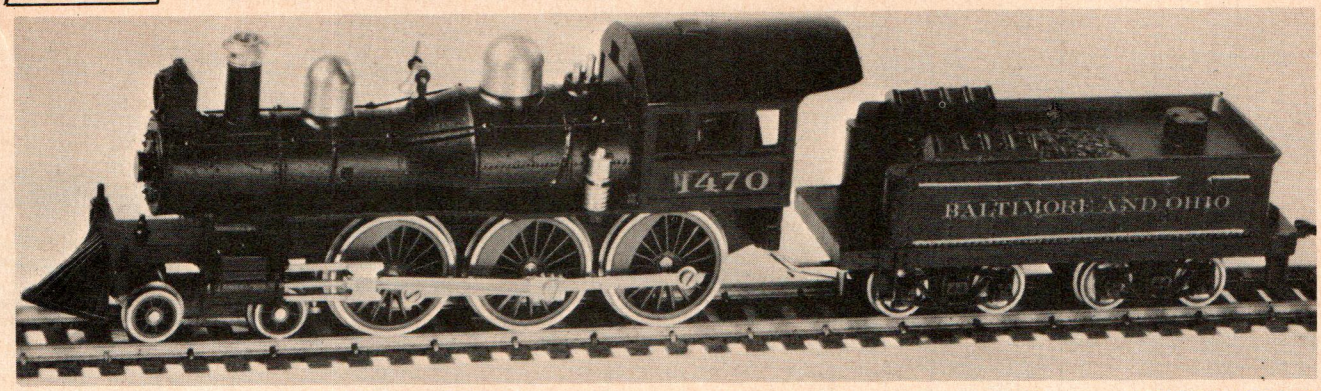


According to Del, his car and the Union Pacific Railway Car No. 100, also built in 1898, were sister cars, with the No. 40 appearing as a younger member of the clan in 1901. No one seems to be able to shed any light on the fate of the UP car.

The late Lucius Beebe gave coverage of the Colorado Midland car on pages 420, 421 of *Mr. Pullman's Elegant Palace Car* and in his *Mansions on Rails,* pages 258 and 235. It is also shown in Cofky's *Colorado Midland.* The author is indebted to Del Gerbaz for the photos and data which made this article possible.

The Cascade as she appeared in 1953 alongside the Aspen branch of the Rio Grande, at Woody Creek.

LOCO BUILDERS PHOTO—271 — 4-6-0



BALTIMORE & OHIO "ROYAL BLUE" — **HO** — **ARISTO-CRAFT**

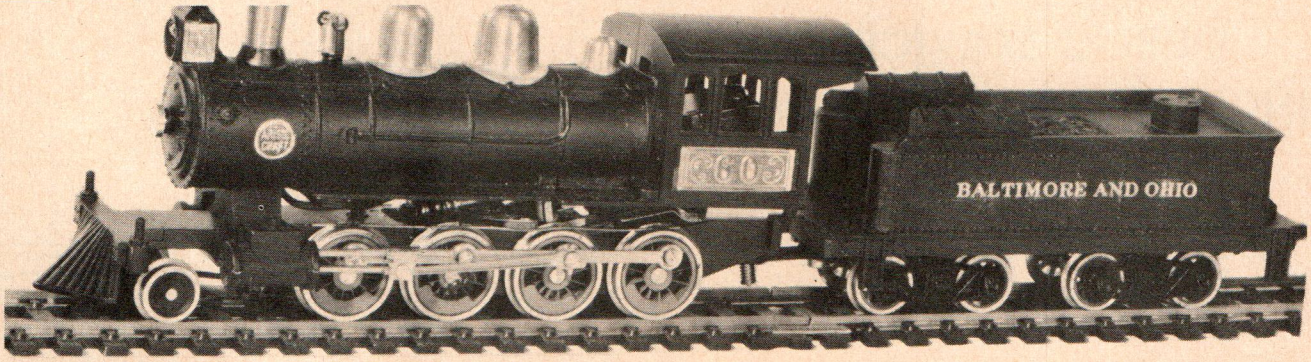
1890 period tenwheeler. Die cast metal construction. Japanese DC motor and worm-gear drive. Horn coupler on tender. Working headlight. Slide valve gear. Arch bar tender trucks. Brass fittings. RTR model painted and lettered Baltimore & Ohio. Mfd. in Japan by New One for Aristo-Craft Miniatures, 184 Pennsylvania Ave., Newark, N. J. Model introduced in 1961. See dealer regarding price. Parts and repair service available.

LOCO BUILDERS PHOTO—272 — ELECTRIC LOCO

NORWEGIAN STATE RAILWAYS CLASS Di-3 — **HO** — **HAMO**

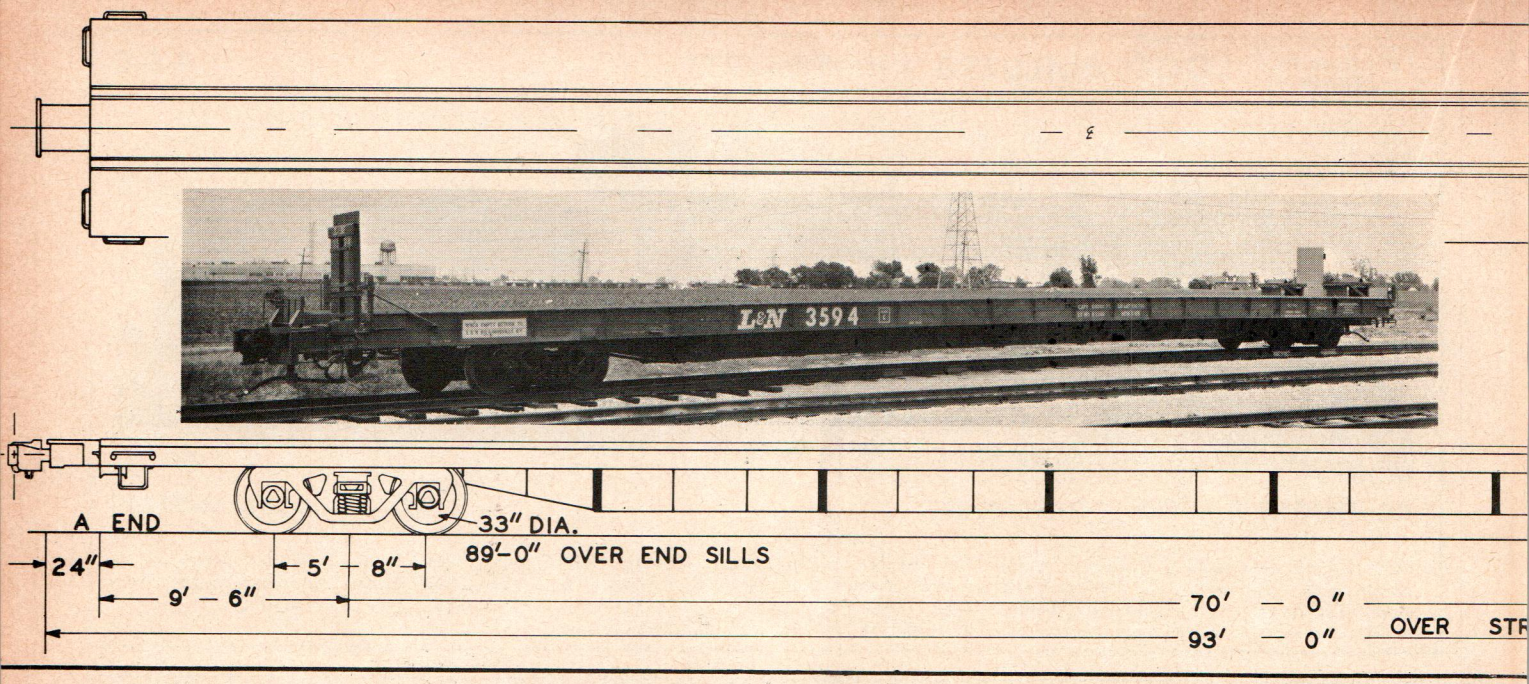
Netherlands State Railways (NS) 0-6-6-0 series, 1200 locomotive. All three axles of driving bogie are gear driven. 4 special adhesion tires. 3 headlamps front and rear. Head code changes with running direction. Length 7¾". Interchange coupler supplied. Inset plastic windows. Blue and silver. 2-rail DC, NEM standards. Mfd. by Gebr. Marklin, Goppingen, Germany. Catalog No. 8351, new 1966. For 3-rail AC version, see LBP 201.

LOCO BUILDERS PHOTO—273 — 2-8-0



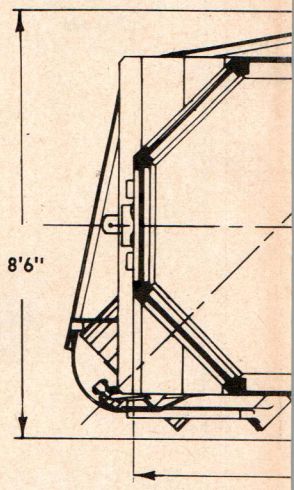
NEW HAVEN 1895 RHODE ISLAND LOCO WORKS — **HO** — **ARISTO-CRAFT**

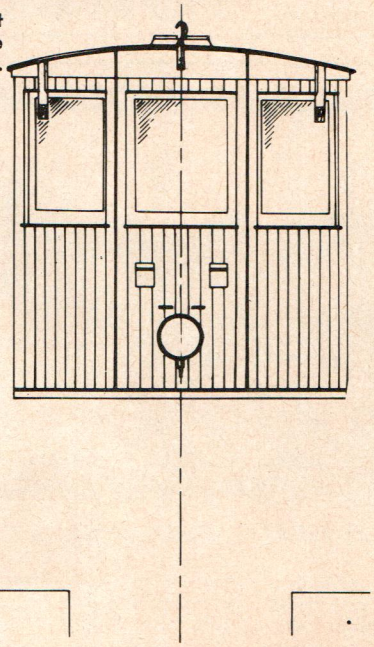
Rhode Island Locomotive Works 1895 prototype built for NYNH&H. Die cast metal construction. Japanese DC motor and worm-gear drive. Horn coupler on tender. Working headlight. Slide valve gear. Arch bar tender trucks. Brass fittings. RTR model painted and lettered N.Y.N.H.&H. R.R. Mfd. in Japan by New One for Aristo-Craft Miniatures, 184 Pennsylvania Ave., Newark, N.J. Model introduced 1961. Importer reports this locomotive out of stock in 1966. Contact importer regarding key parts availability. Some dealers may still have this locomotive in stock.

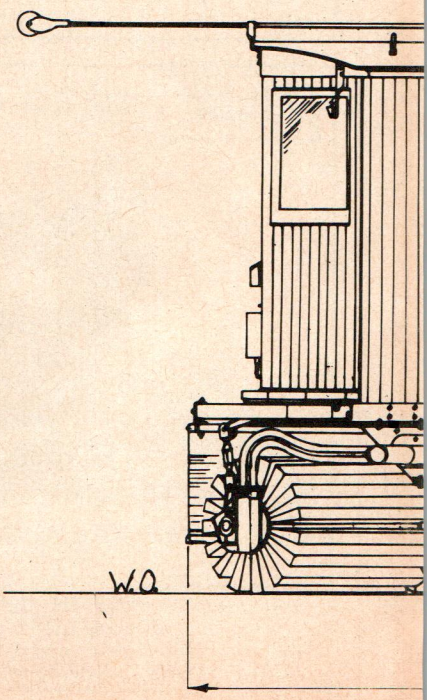


Public Service of New Jersey Trolley Sweeper 5181 was snapped at Union City, New Jersey at the big barn on 32nd St. in the late 1930's. PSNJ painted their work equipment a deep railroad green.

Photo by Robert T. Van Buskirk



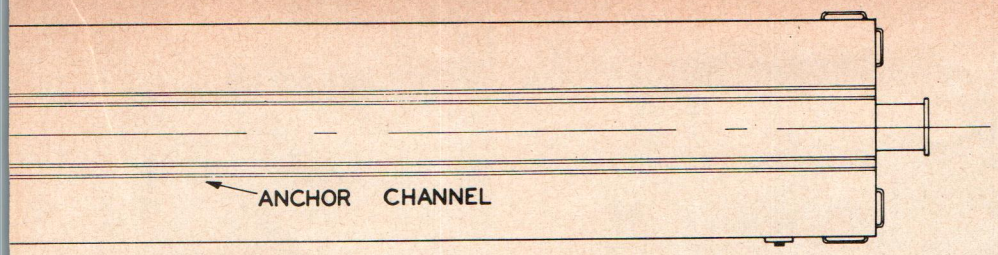


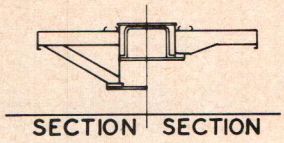


PUBLIC SERVICE SINGLE TRUCK SWEEPER

drawn by Walter Olevsky

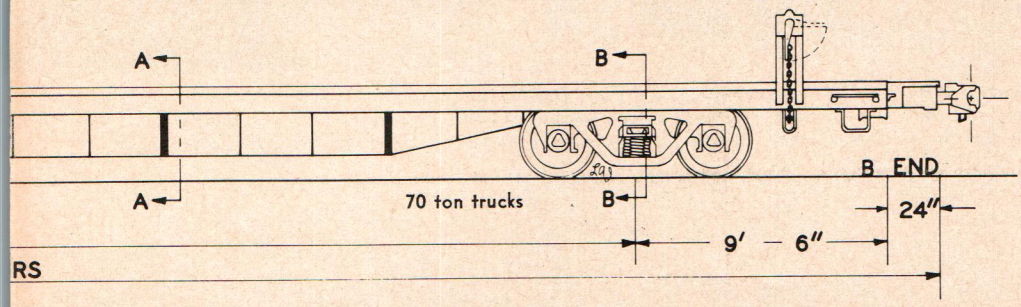
Trolley sweepers helped keep Public Service's hundreds of miles of city trackage clear of debris, rock, dirt, snow.

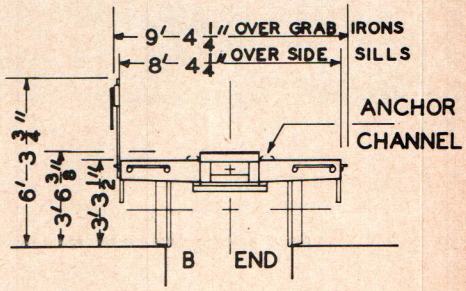


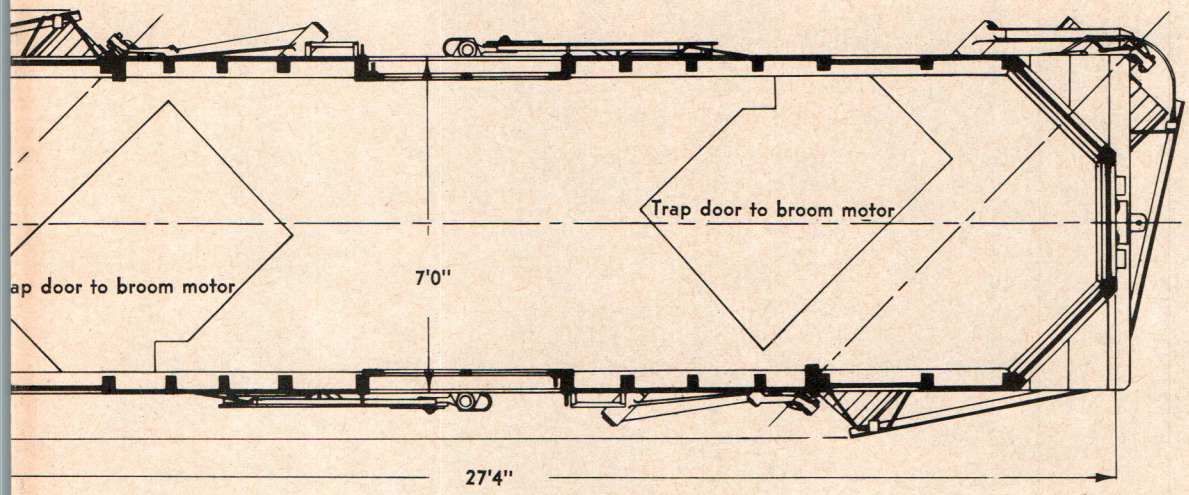


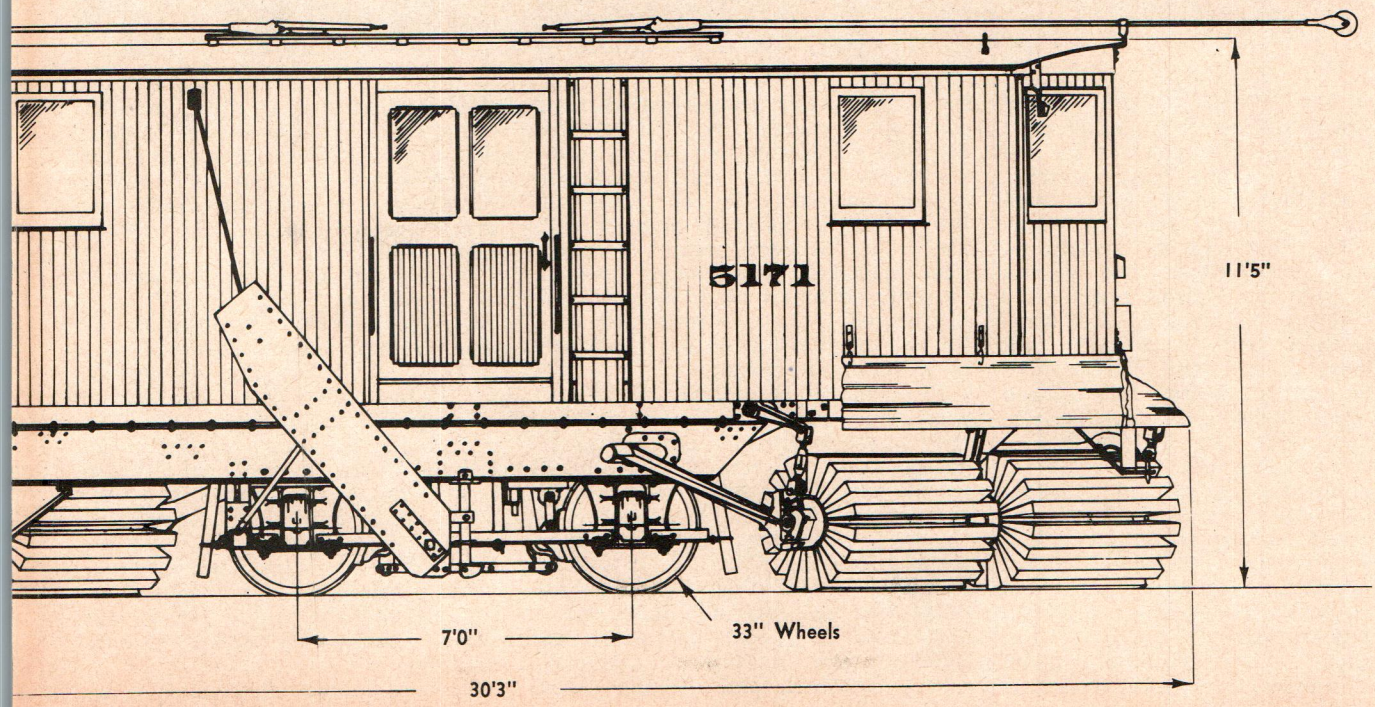
Thrall Car Mfg. Co. turned out L&N cars like this in May 1965.

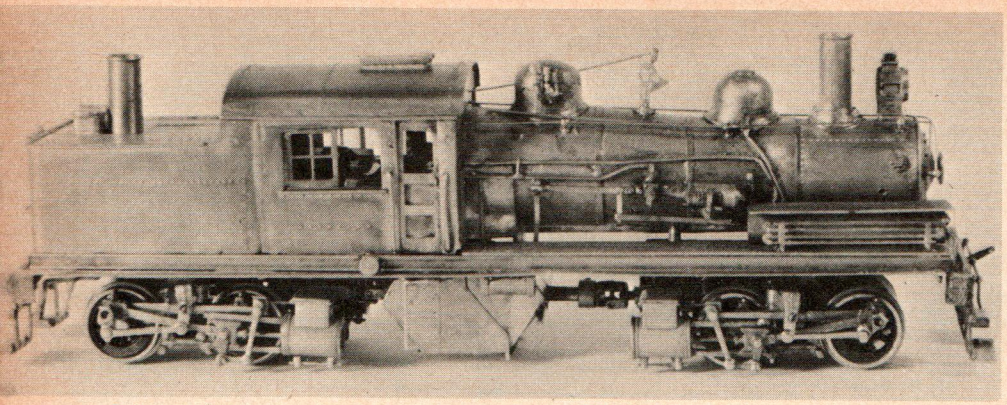
89 Ft. Flat Car — Full Cushion Underframe









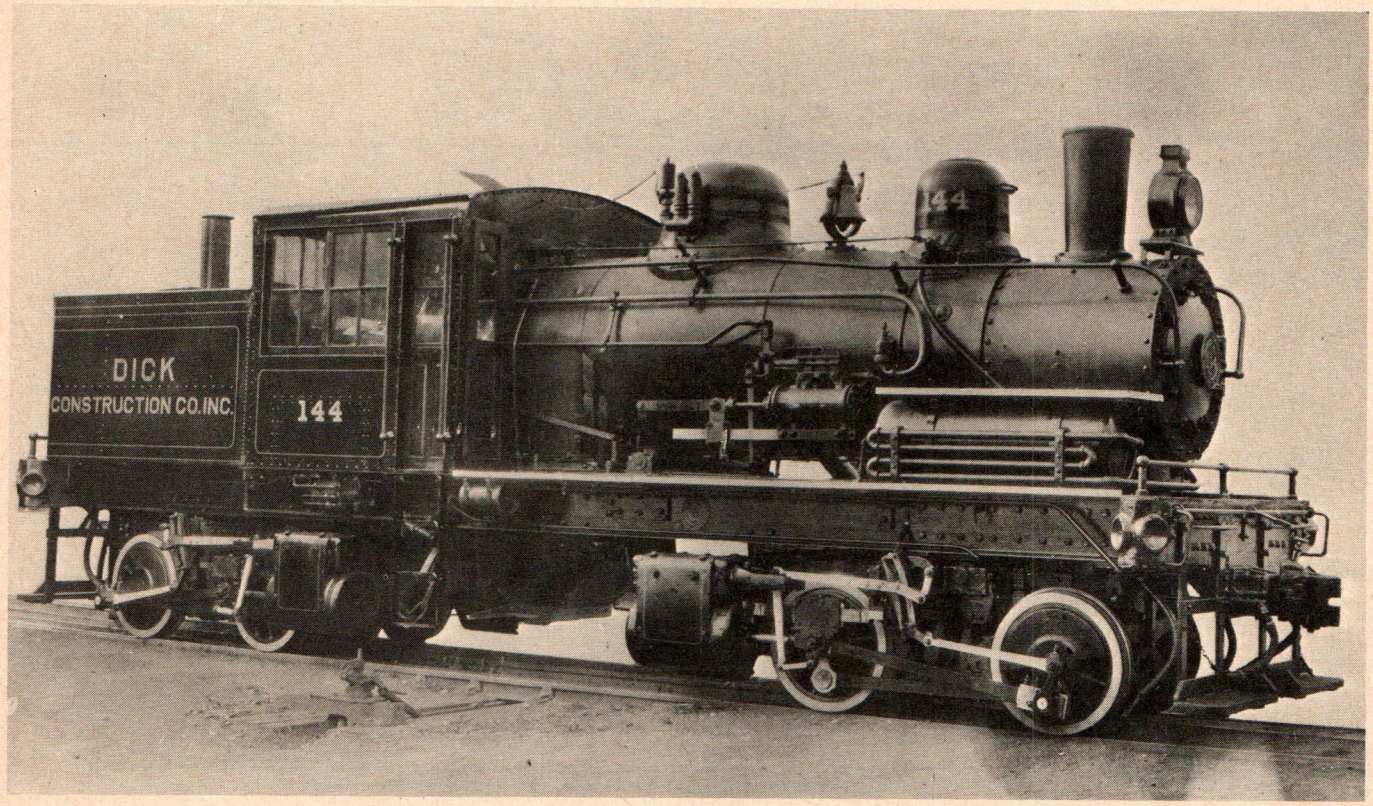


VULCAN DUPLEX

by Bill Schopp

Schopp's Vulcan Duplex utilizes the drive from a PFM Heisler, valve gear from two PFM Climax locos, plus various other new and salvaged parts. Model should be operated slowly, as per the prototype loco.

BELOW: Dick Construction Company's No. 144, in a right hand view. Vulcan Duplex locomotives were built in very limited quantities; saw use in industrial and construction work at very slow speeds.



What's a Vulcan Duplex? Never saw it before, or heard of one? Small wonder, with most of the attention given to the geared entries, but you'll find it in the Locomotive Cyclopedias, usually just one view, and always back in the section on industrial locomotives. The Vulcan Duplex was the Vulcan Locomotive Works' entry into the industrial locomotive field, built to compete with the Shay, Climax, and Heisler. The Vulcan was not geared but utilized two industrial steam type mechanisms under a boiler, cab, and tender, all mounted on a flat bed.

I cannot take credit for building the first Duplex, since one was built some years ago in Japan for a European importer, who gave it to me for a brief stopover and some needed repairs, before I sent it on to Keith Edwards at Kadee.

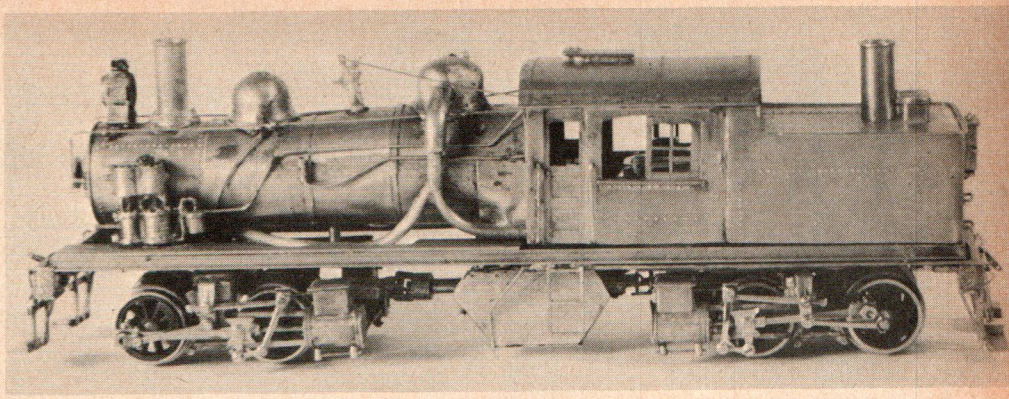
Problem No. 1 in building a model of this unusual locomotive concerns the drive. After examining various commercial models, I decided that the drive in a PFM Heisler geared locomotive was just the thing, with small spoked drivers, side rods, gearbox (as well as a similar superstructure). First, the Heisler's special cylinder and crankshaft arrangement had to be removed and a plain piece of rod substituted. This is a mean job and I won't specify how to do it because of variations in design.

Problem No. 2 concerns the valve gear. This must be so much smaller than any usual valve gear or parts thereof that at first I thought it would have to be made of specially created parts, a time consuming job at best, However, careful study showed that the PFM Climax should do. Your dealer should be able to order you two sets of Climax valve gear from PFM, each part of which includes the cylinder, crosshead, guide, flywheel, and a back piece which is discarded. It might be noted that should the PFM supply of these units run low, PFM might reserve the right to divvy them out only to PFM Climax owners needing replacements. In that case, you might have to build these up on your own.

Problem No. 3 concerns the data on the locomotive. The Vulcan Works is out of the locomotive business and all data on their locomotives has been disposed of. I was able to get the photos and other data needed for building the engine from Bill Ellis, of Pittston, Pa., who is as knowledgable on Vulcan as anybody I know. As it turns out, my Duplex was made in an assortment of features all garnered from photographs of various prototypes, so it is not a model of any specific prototype, and is indeed influenced slightly by the Heisler and Climax components used in its construction.

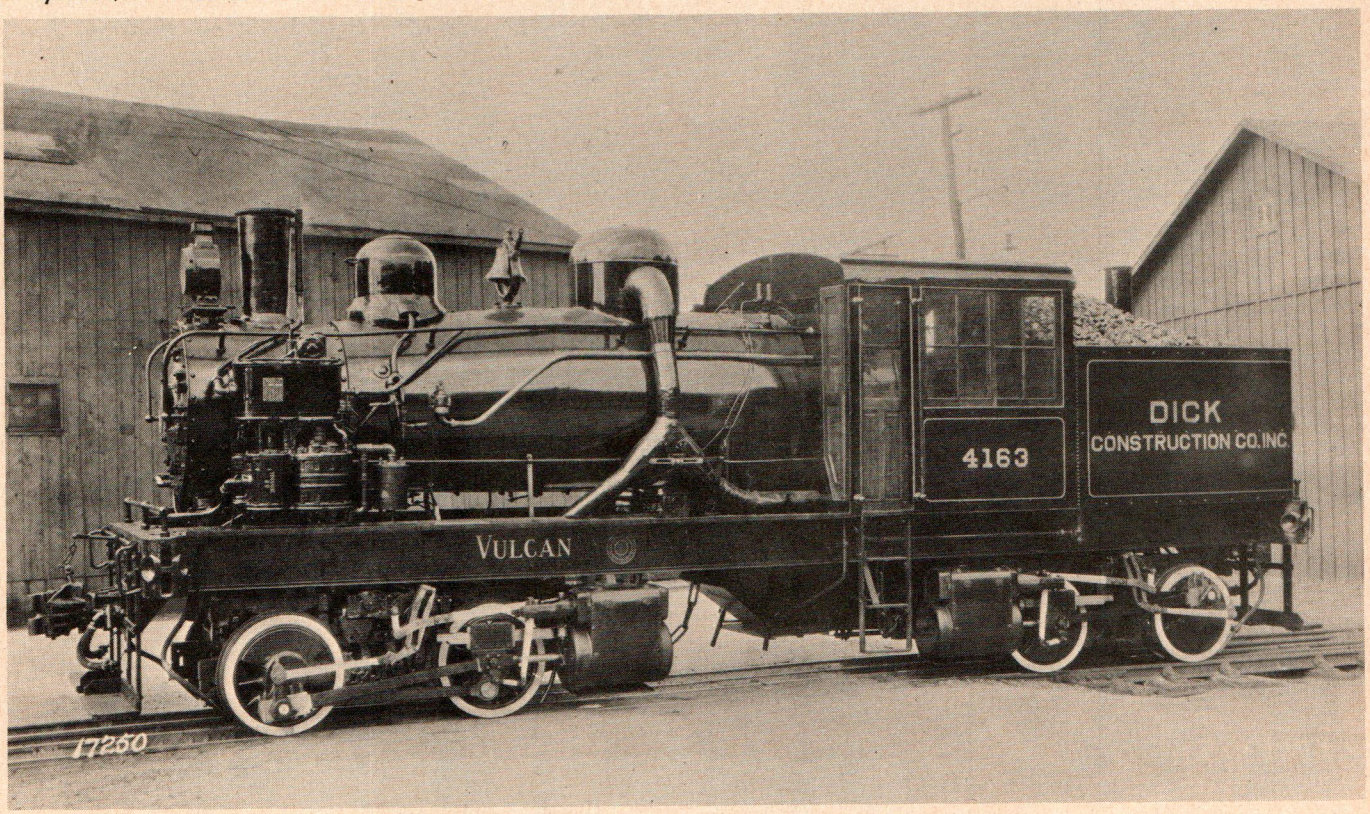
After removing the Heisler cylin-

Vulcan Locomotive Works answer to the Shay, Climax, and Heisler, was a unique 0-4-4-0 called a Duplex.



BELOW: Left side view of Dick Construction No. 4163. Engine developed tractive effort of 27,860 lbs., had 33 inch drivers, four 13x16 in. cylinders, and wheel base of 5 ft. Vulcan plant was at Wilkes-Barre.

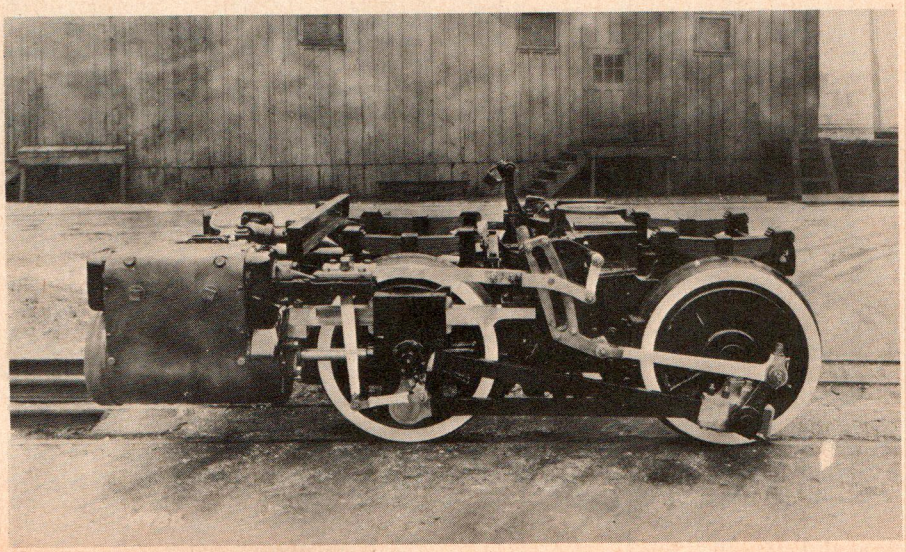
Left side view of author's HO brass model, few of which have been built. Vulcan Loco Works specialized in industrial, mining, and foreign type locomotives, in steam, diesel, electric types.

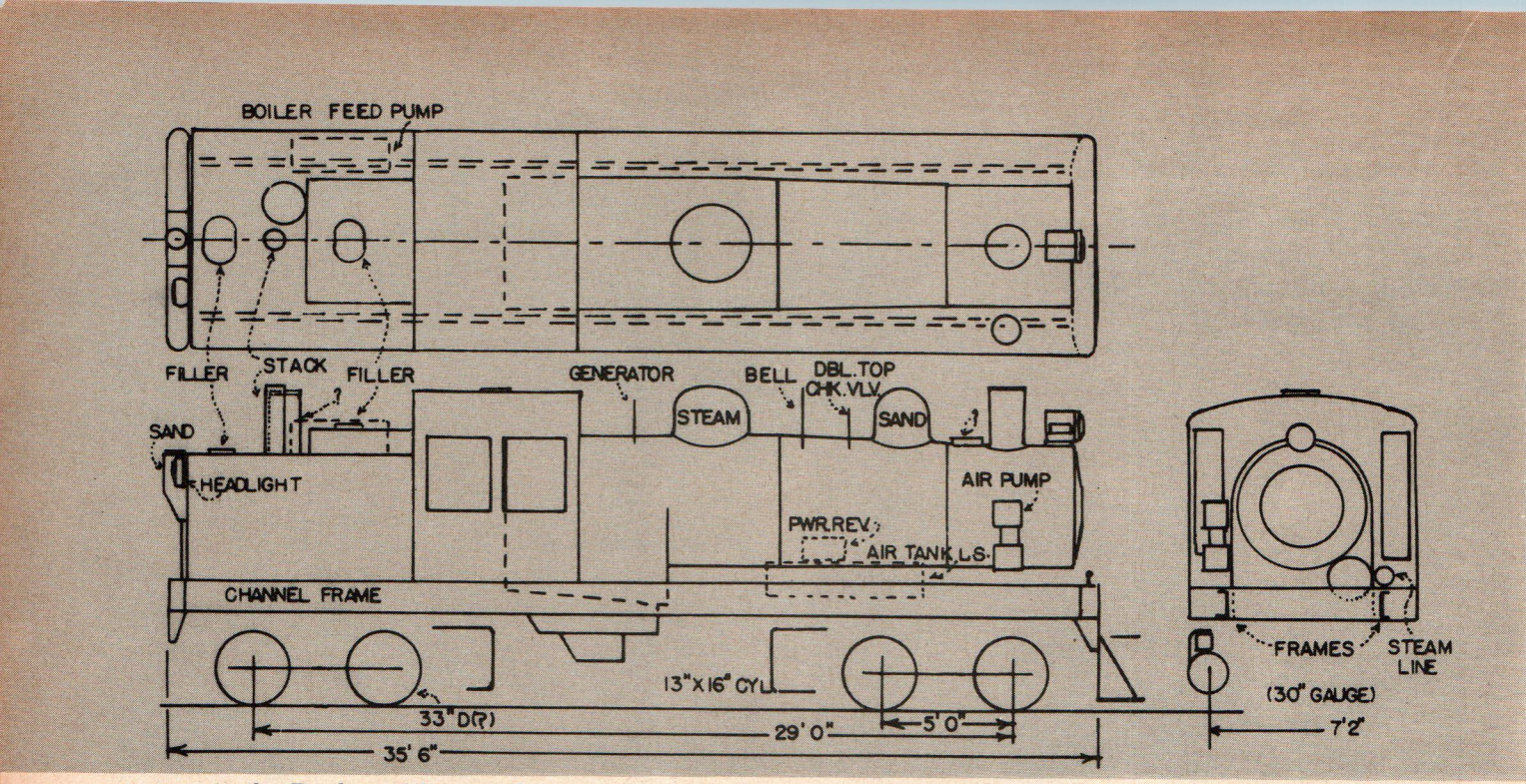


ders, I began work by converting the trucks. The box-top Climax cylinders are not the type used on the real Duplexes but in order to facilitate the building of the model, I chose to use them anyway.

These were mounted (by soldering) on special outriggers shaped and soldered to the Heisler retainer plates. The Heisler outer short crankpins had to be replaced with longer ones, of course, because of the main rods running there. The valve gear hangers I at first soldered to the ends of the crossheads guides, but when these kept dropping off, I ran a piece of brass angle across the top of each truck, soldered it, and then soldered the VG hangers to it, making the assembly much more substantial.

At various times during construction tested the loco as far as it had progressed, checking the freedom of motion of the valve gear, etc. One thing did develop which has made



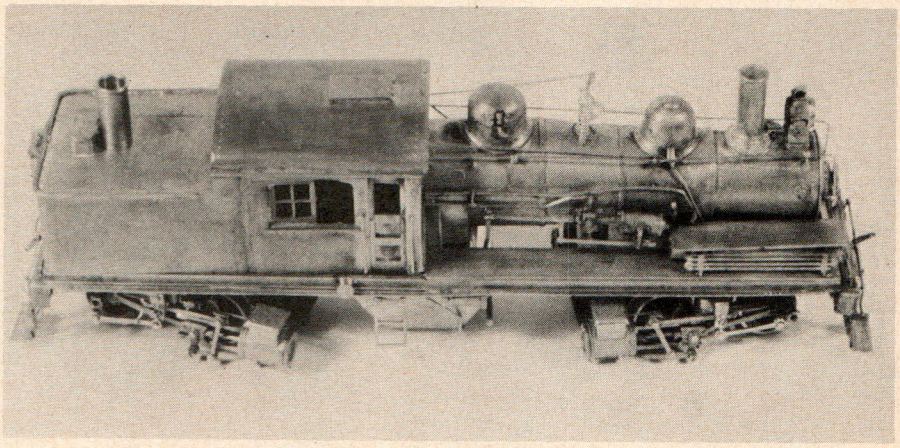


me operate the Duplex with a gentle hand on the rheostat, rather than my usual (and widely sneered at) full speed stop, start, and reverse. This was the lost motion or slack in the worm/gear reductions, two slip joints, four universals, plus helical gears. Therefore, at a full speed start, the motor would take several turns before the power started to act on the wheels: a full speed reverse would double that, and I feared for the integrity of the whole "works." I would suggest that IF you have a choice, you should use one of the later version Heisler models which have helical gears on all axles, rather than the early one which has them only on the outer axles (even though that be truer to prototype).

While my procedure, having the valve gear at hand, was to start with the trucks, I suggest that you, probably having to wait to get the valve gears, start with the superstructure. I finally had to make a new frame or floor, following the Heisler design, in order to make things work. And I wish now I had set the frame in from the edges of the floor in order to give a better appearance.

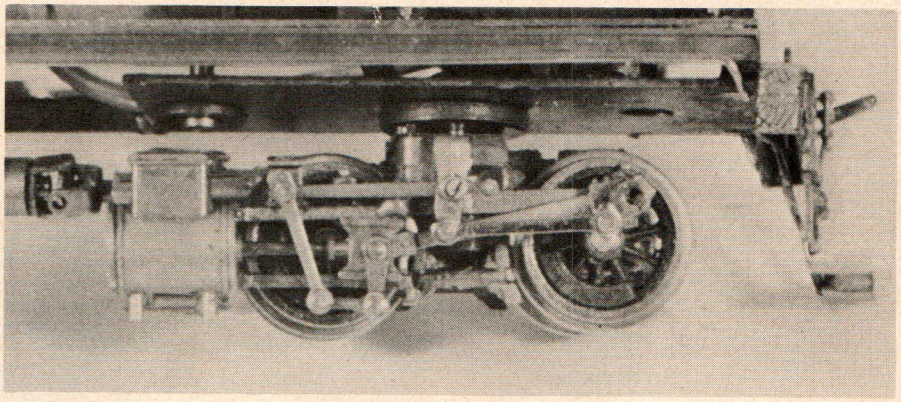
The general outline of the Heisler superstructure seems satisfactory, but according to the photos, the Vulcans had the doors at the fronts of their cabs. So I jewelers'—sawed out the Heisler cab sides and exchanged them r.s. for l.s. and vice-versa. The domes could have been used, but I did have other domes in my scrapbox that looked closer, so used these per model photos. Please note the fat wye shaped pipe which comes out of the left side of the steam dome, to conduct steam to each set of cylinders. This does not appear in the single Loco Cyclopedia photo (which is of the right side) and so might fool anyone who attempted a model just from that one pix.

If you try to build yourself a Duplex, do not feel that you have to follow any plan (sketchy as it is) or photo slavishly. The idea should be to create the impression. There were so few of these engines made and they are so relatively unknown that few if any people will be able to tell you that anything is really wrong. So few of the prototype-hounds nowadays got their knowledge from real steam locomotives beyond their childhoods. They get it from pictures in books and from sometimes garbled "lore" passed along by others. If and when you find anyone who has authentic knowledge of steam, latch onto him, and get all the information you can. There are such people around, but as time goes on, they get fewer and fewer. When all whose steam loco experience is based on the real thing, and plenty of it, are gone, steam expertise will be left in the hands of a few dedicated men such as present day "old-timer" experts.

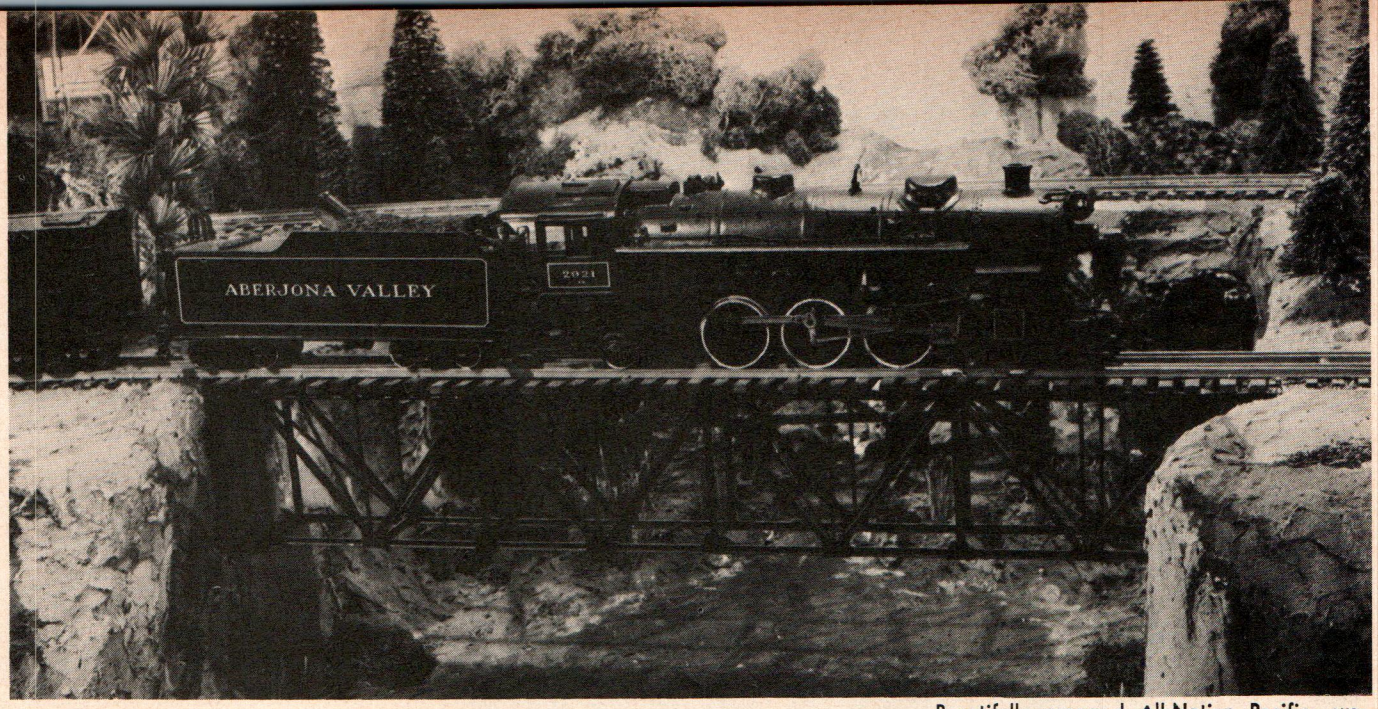


Locomotive model can be made to negotiate very sharp radius.

Closeup view of front mechanism on author's model.

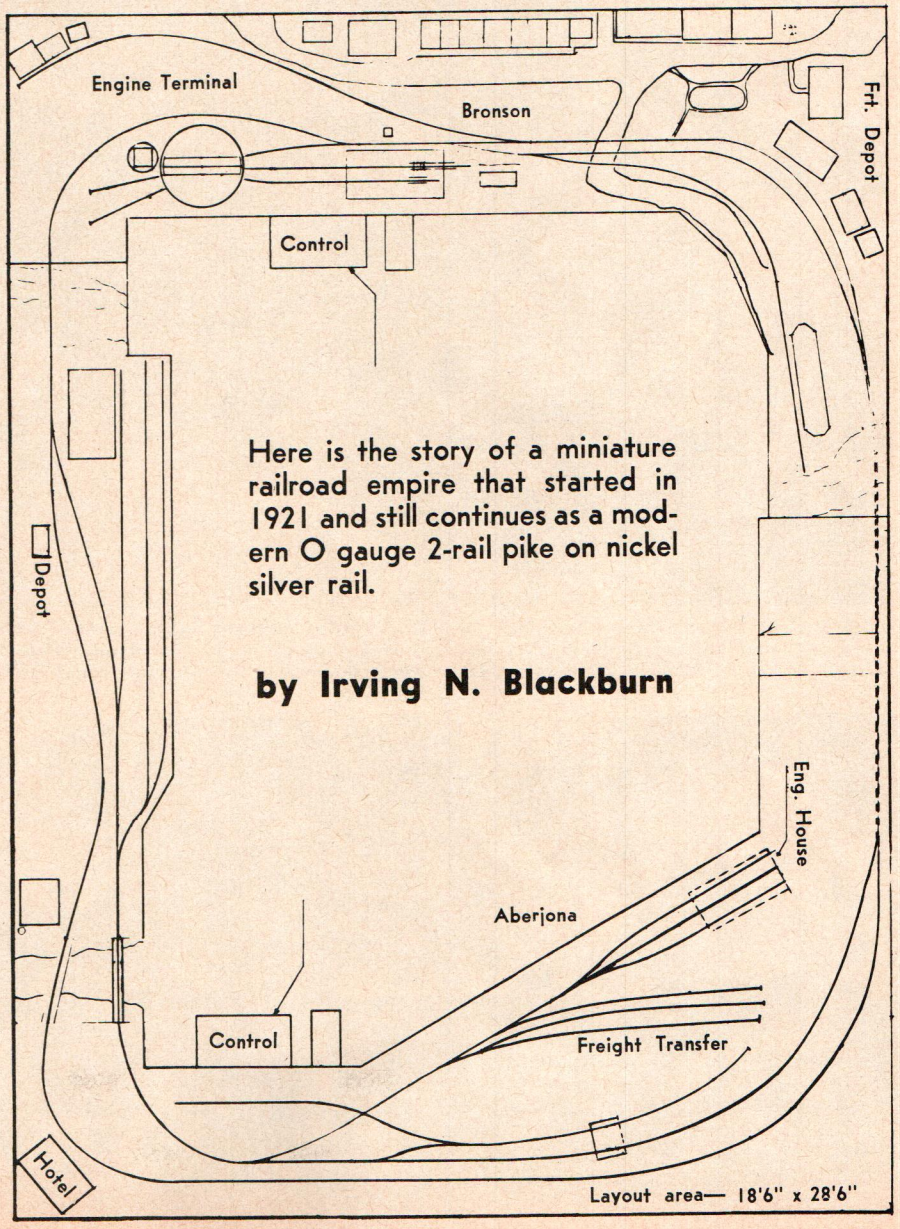


Model photos by James Albanowski.



Beautifully groomed All-Nation Pacific, custom built for the AVRR by Bill Thomas, of Philadelphia. Truss bridge looks delicate, is built up of .072 brass rail.

ABERJONA VALLEY R R



Here is the story of a miniature railroad empire that started in 1921 and still continues as a modern O gauge 2-rail pike on nickel silver rail.

by Irving N. Blackburn

"Why don't we meet once a week and railroad?" It was my youngest son speaking. I had just begun my seventh model railroad layout, the fourth Aberjona Valley in 0 gauge and for the first time my two grown sons were displaying an interest in it.

Both had been thoroughly indoctrinated in model railroading, having always lived in a house with a model railroad. Now both having married and with families of their own showing a desire to "join forces" with the "old man".

Needless to say I was mighty pleased at their suggestion.

Meetings have been held the past two years on Wednesday nights, summer and winter, despite outdoor activities during the summer months. No one would listen to a suggestion to discontinue our sessions.

The group has grown to include, besides the author and his two sons, a jewelry salesman, and a New York Central brakeman.

Our meetings follow no set pattern but there are always suggestions for improvement, new construction, maintenance, cleaning or just talk. At the close of each session the dining car superintendent takes over with a coffee bar.

The Aberjona Valley Railroad had its beginning in 1921 with an odd collection of Lionel and American Flyer locomotives and rolling stock.

In those early days we attempted 3 rail using tubular tinplate rail laid on individual wooden ties using #10 bare copper wire as an outside 3rd. A Lee B. Green Hudson Locomotive, a few Walthers Pullmans and some Westbrook and Scalecraft freight cars completed the roster.

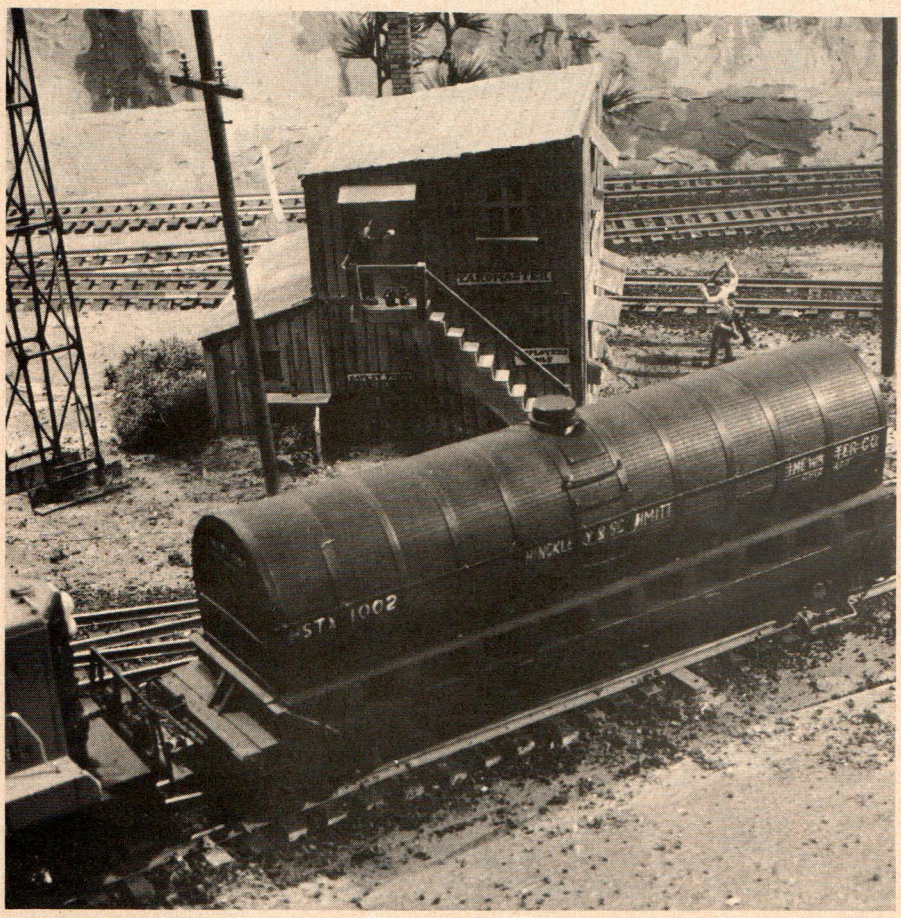
Progress came with 2 rail, first with brass and now nickel silver rail. We

have experimented with all kinds of products and materials that have been offered from time to time and feel that now we have the best.

The name Aberjona Valley comes from the geographical location of the railroad as it is in the valley of the Aberjona River which travels through the eastern part of the city of Woburn, Massachusetts.

Using code 172 nickel silver rail with cab control, the layout occupies the entire basement at 5 Wyman Street, Woburn and is fully sceniced. Open table top construction was used with most of the trackage 42 inches from the floor. It is as you can see from the track plan a single track with passing sidings around the wall layout. Years ago, Al Kalmbach wrote that single track always gave the illusion of much more distance than double and we have always followed that theory.

From the bench top to the floor, green burlap has been hung to conceal the uprights and wiring. Overhead all lighting is concealed behind a valance around the entire layout. No colored lights or daylight to darkness attempts have ever been tried but we do have a tape, together with railroad sounds which describes the entire history of the Aberjona Valley.



ABOVE: Scratch built tanker was built of wood and hand lettered by Niles Blackburn. A-1 rail on line is .072 nickel silver on wooden ties.

BELOW: The Aberjona Valley's crane clatters over a crossing in a work train. Progress comes slowly when everything is scratch built, but is fun.

Motive power consists of a Lobaugh 0-6-0, an All Nation Atlantic, 10 Wheeler, and Pacific, (all built by Thomas of Philadelphia). Beautiful smooth running jobs that will start on 4 volts. Also a Lionel GP7 that has been 2 railed and a Walthers MU unit that never fails.

Rolling stock consists of 12 Pullmans, 6 Day Coaches, and 50 freight cars. A scratch built drovers caboose, wrecking train, and tank car complete the roster.

The layouts has been blocked to handle trains of 10 to 12 cars. As there are no heavy grades, locomotives have no difficulty hauling their required tonnage.

Variacs have been used for control in each cab. We have always been pleased with their performance and consider it a most satisfactory method of control. Transistor throttles without a doubt could be superior but we are not up on electronics enough to try it.

Power supplies are 10 amp transformers with selenium rectifier at each cab through a Variac. To smooth out any AC ripples we put a 2000 mfd condenser across the track leads. This not only gives a starting boost but also has a coasting effect on stopping.

Switch machines are aircraft relays, connected to the turnouts by means of Arvid Anderson tie bars. The Anderson tie bars filled a long felt want on our railroad. Installed properly between the rails, they are unnoticeable and perform properly.

Aircraft relays are used also to control the power to the rails of the gauntlet track across Door Canyon Bridge and also give visual indication at the cab panel.

Six hundred feet of code 172 nickel silver rail has been laid on individual ties and then ballasted with loose ballast. Ground cork, sand, bird gravel, and roofing gravel has been used for variation and also to prevent monotony of track apearance. Loose ballast is used and has never given trobule.

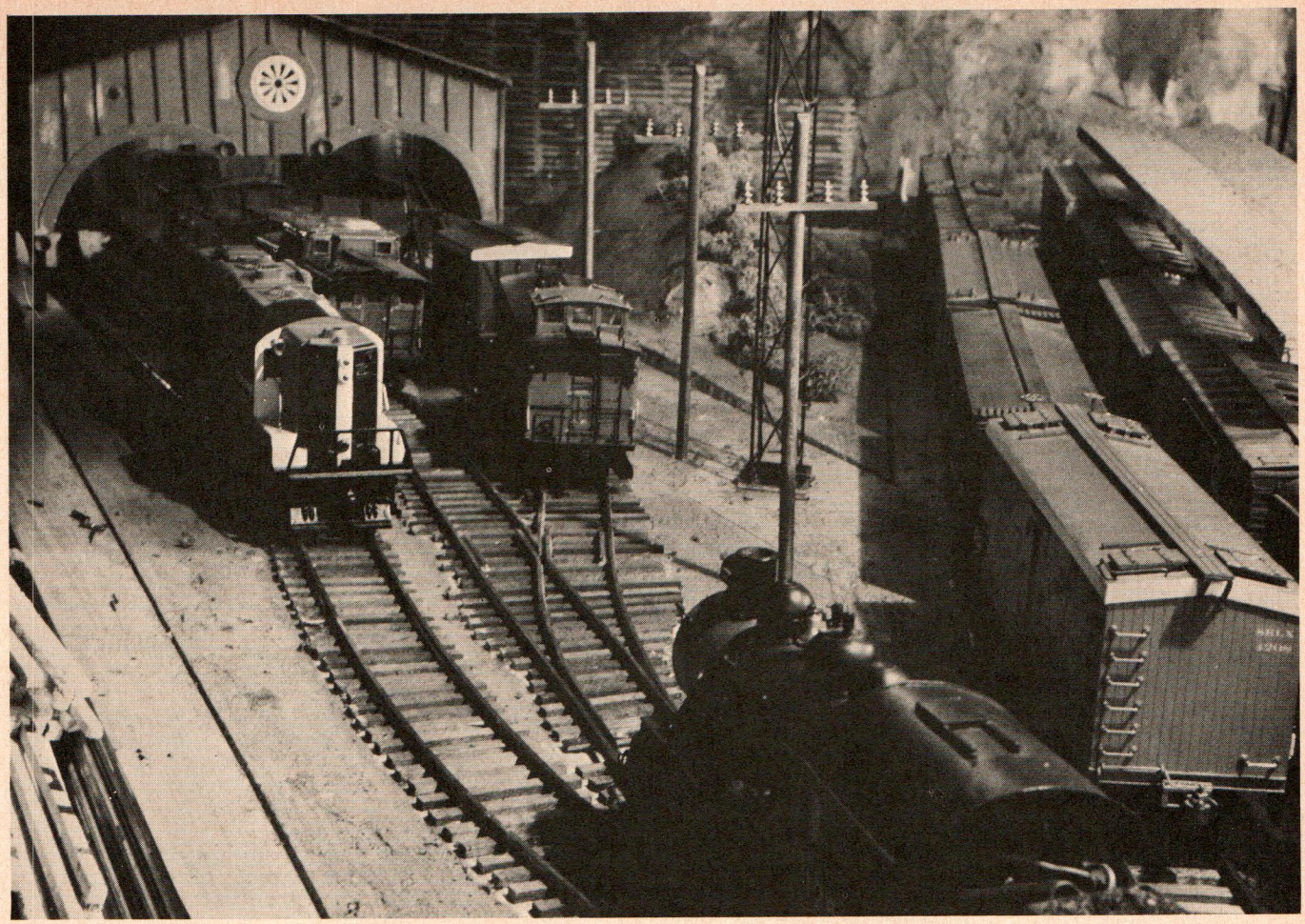
The turntable at the engine house is the true Armstrong Type using a small crank that extends through the bench work. It operates very smoothly and handles all motive power. It is of the type of the 1900's with a pit formed from wooden ties laid in the wall.

The bridge over Queeche Gorge is a tall timber trestle while the bridges at Dorr Canyon and Pratt Falls are fabricated from 0 gauge brass rail.

Three freight yards, each with a capacity of about twenty-five cars provide plenty of opportunity for making and breaking up manifest without blocking the main line.

At Yard B tracks leading to the engine house are wired so engines can be run in and be left to idle at the will of the operator without interferring with other movements.

The railroad runs through the mythical town of Bronson with railroad station, with three tracks, two



Yard and enginehouse at Aberjona are relatively simple but are adequate to handle traffic. GP-7 is converted Lionel with scale wheels and CLW couplers, retains B&M plumage. Cabooses are plentiful.

through and one stub end, common with Soldiers Monument facing a brick Church built in the form of a cross with organ inside, fire station, garage, bank, apartment houses, movie theatre, mill, drug store, and haberdashery.

All structures are illuminated. The engine house has two tracks and is an 0 gauge copy of an HO built by John Allen. Most of the buildings have been scratch built.

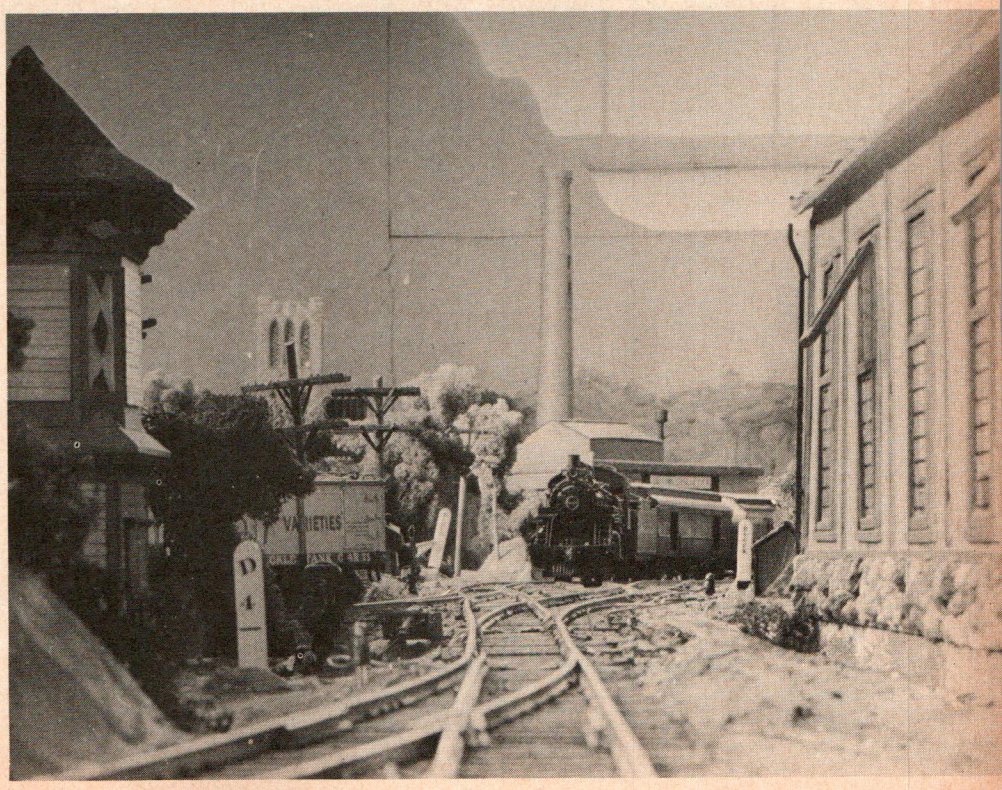
Rails are painted first with a coating of Floquil rust and then grime. It is an amazing improvement in the look of track once the sides of the rail are painted and it is well worth the effort involved.

A major change in the future will be double-tracking the main line. This is an "urban renewal" project of some magnitude for it will cause some dislocation of both structures and track.

A most important contribution to 0 gauge in recent years has been the introduction of a truly automatic coupler by Central Locomotive Works. They are very close to prototype, work beautifully and supply something has been needed for some time.

The Aberjona Valley has completed a conversion to Central Locomotive Works' new automatic knuckle coupler. We find these very close to prototype and they work beautifully, couling also with visiting equipment having either standard AAR dummies, or Monarch working knuckle couplers.

A trim Ten-Wheeler heads up the morning local into Bronson, with enginehouse on right, power plant and church tower shown in the rear. This O gauge pike finds 2 rail better than old style 3 rail.



THE HENDERSON BRANCH by the Layout Doctor

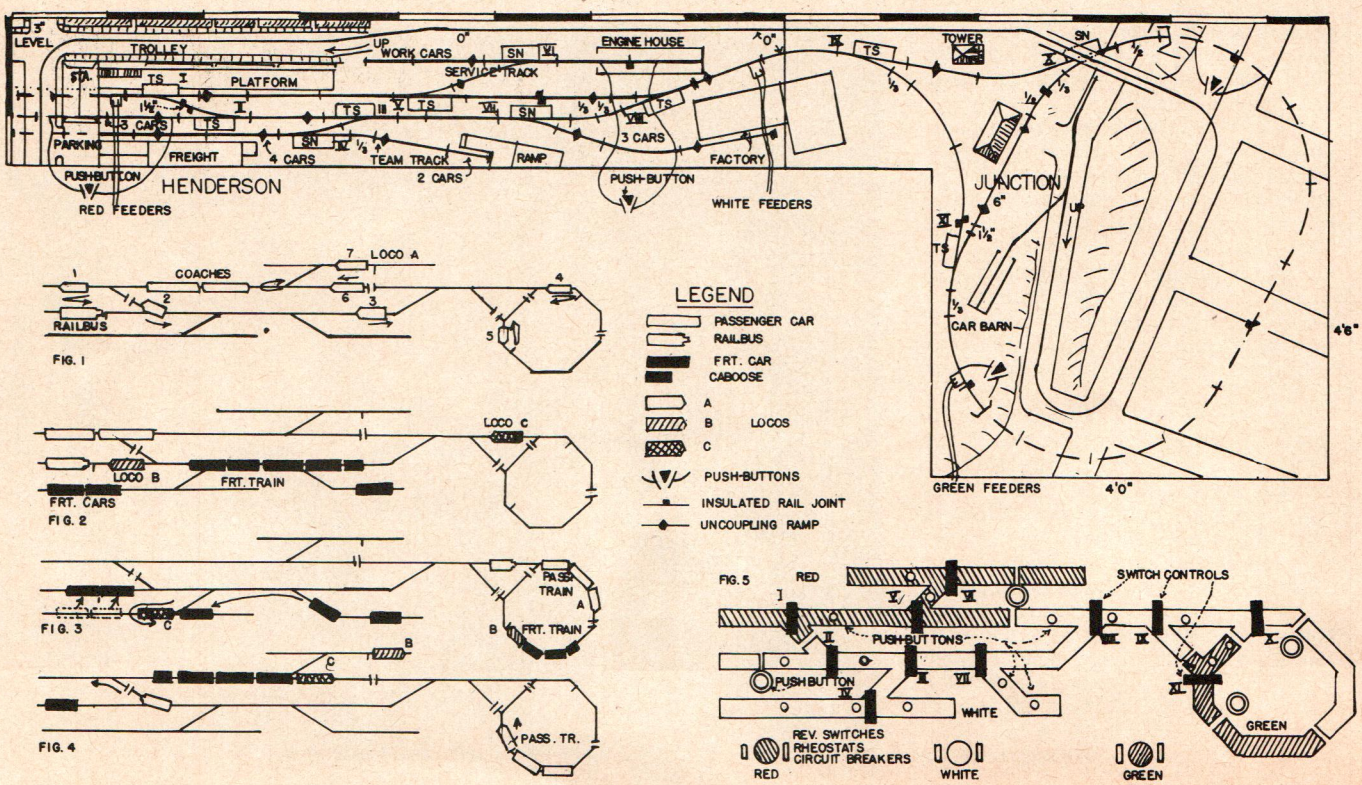
The once popular short branch line to reach a city by-passed by the main line, furnishing frequent passenger and necessary freight connections, is fast disappearing at least so far as passenger service goes. The only one in my immediate locale is the Princeton Branch of the Pennsy which runs a few miles in from Princeton Junction to give the university borough frequent connecting service to New York and Philadelphia. Prior to the Civil War, the Pennsylvania (then United New Jersey Railroad & Canal Company) ran its main line along the bermbank of the Delaware and Raritan Canal which passed, and still passes, within walking distance of Princeton. During the Civil War, the present mainline directly from Trenton to Monmouth Jct. was built, the canal line abandoned, and Princeton given sop by good branch line service. There may be other such passenger spars still extant—they were once numerous all over the country—but here I have shown in model form a similar line called the Henderson Connecting R.R. or Henderson Branch.

It has been designed to utilize sectional track, initially on a shelf 18" wide by 8' long. Later an L-shaped addition can be added at right, cut from a four by six foot piece of Homasote or plywood with necessary supports added. Any make of sectional track can be used, depending on what is at hand, but both makes of switches should be used as designated by the letters TS for KEB Tru-Switch and SN for Snap-Switch. These are geometrically interchangeable but have slightly different electrical characteristics: the Tru-Switch "kills" the track against which it is set thus letting a train be held there; the Snap-Switch does not and can be fed power from any of the 3 ends, an advantage in some spots.

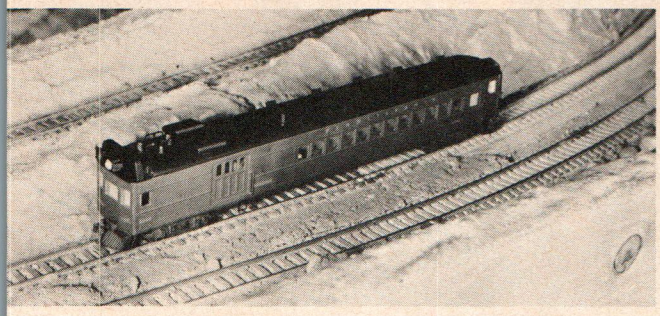
The Henderson line comes in at right with single track, divides into two for a run-around track, which comes in under the high-level Henderson station where there is an escape crossover. In front of the two tracks mentioned is a spur serving a freight station, as well as another spur off this serving a team track and ramp for end-unloading. Behind the two tracks is an engine-house track with another spur off it for storage of work-train equipment, snow-plow, wrecker, or whatever will not be needed very often. Engine service facilities can be in between the engine-house and the depot. I picture the engine-house as several of the AHM (Airfix) one, spliced together, or possibly a long Vollmer single-tracker. The passenger terminal at Henderson can be an Atlas station with the short platform roof, plus several additions, placed down at the low level over the platform. Note that the platform has been placed at the inner side of the table so that the detail you work into your scenery there can be seen.

At first, the extension of the entrance track to the right can simply go straight along the wall, perhaps fixed to drop down when not in use. Eventually the track should be run to a larger platform and connection made to a reverse loop so you can turn a whole train to head back into Henderson. On the plan I have made a complete wye at Junction not only to give more possibilities of running, but to let you turn engines from Henderson without recourse to a space-consuming turntable.

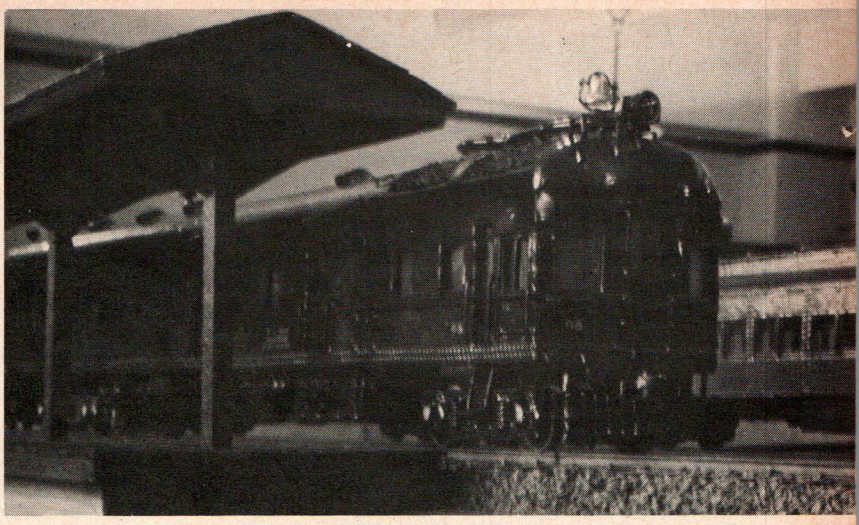
I picture shuttle passenger service out to the Jct. to connect with mainline trains carried on by a rail-bus which normally stays on the spur of the center track at left, as in fig. 1. This backs over to the passenger platform before heading out to the Junction, where, after the main line train has gone back into the tunnel, it reverses on the wye and heads back to Henderson. Later it backs out to the Junction without passengers in order to be able to head out later on again, *with* people. A rule forbidding backing the rail-bus with pas-



Short feeder branch lines offer great possibilities, especially for modelers whose space is limited.



R. H. Cole built this Pennsy gas-electric, idea; equipment for branch feeder service. Small 4-4-0 with coach could also be used, as could an RDC.



A vintage Brill gas electric waits at Henderson terminal for the few passengers who will want to make the connection with the express at the jct.

sengers should add a little extra interest to train operation.

Of course there will also be direct passenger service via the branch and main line to a distant metropolis. Fig. 1 shows what happens when such a passenger train arrives at Henderson. The engine uncouples, leaving the cars on the platform track, and pulls up on the escape track, position 1. Then it backs through the escape crossover (2), heads out the escape track (3) to just past the wye (4). If there is another train hiding on the underground portion of the main line, it will *not* move with the engine since that portion of the trackage not directly adjacent to the wye is energized via push-buttons. It heads down to position (5), then backs in along other leg of the wye to position (6). Since there won't be space for it to clear the engine-house switch, the passenger cars must be pushed back on the escape track, partially under the station (shown in fig. 2), after which the engine backs into the engine-house, ready for the next run (7).

Arriving freight trains can be worked similarly if the coaches are not in the way; otherwise procedure in fig. 2 can be used. The freight pulls in on the escape track and engine uncouples automatically and pulls up past the switch to the railbus spur which has been divided in two by the insulated rail joiner in one rail and push-button around it. The track is then rendered dead by turning the Tru-Switch of the escape crossover. Another engine then comes in from its waiting spot on the wye (held until needed by turning Tru-Switch IX against it), couples to the rear of the train and switches the cars where needed.

It should be noted that storage spots for cars on the Henderson end are rather limited in number. For that reason lengths of trains as well as total number of cars in service will have to be kept well within reason. The two passenger cars shown should be enough, with six to eight freight cars and a caboose. Although three locomotives are shown, you could get alone with one, certainly two. However a third can be added. Likely one of the locos could be lettered for Henderson Connecting R.R., while the other two could be lettered for whatever the main line railroad was. The railbus would be for the Henderson line.

What engines to use? If steam, I'd suggest either an 0-4-OT or 0-4-0 with tender as the first loco (alternately 0-6-0 or 0-6-OT). The second engine could be a 2-6-0 mogul, while the third could be either another switcher, a geared engine, or even a diesel switcher. If the line is to be diesel, the first engine would be 4 wheel industrial type switcher; the second a 1000 h.p. switcher such as the EMD, and the third a more elaborate unit such as a BL-2 or any road-switcher. One of the engines, again, could be the opposite kind, a steamer, just for the sake of being different and having both kinds of power. (No mention has been made of electric or trolley locos, but you might want to consider it).

Fig 3 shows how two trains can be held out on the hidden part of the main line, while another works the terminal. Here we see how a loco has pulled the two freight cars shown at the freight station in fig. 2 pulled out and shoved into the center railbus siding (or elsewhere). Then the engine pulls the car meant for the team track from, say, the factory siding, shoving it into the team track.

Fig. 4 shows another interesting operation. While one train waits on the main line and another is on the platform track waiting to depart, the railbus arrives. With the platform track occupied, the railbus must enter by the escape track, cross the escape crossover, to the extreme inner end of the platform track. The outbound train is then ready to proceed. After that the rail-bus can be reversed and the other train can enter the terminal, either in that order or the opposite.

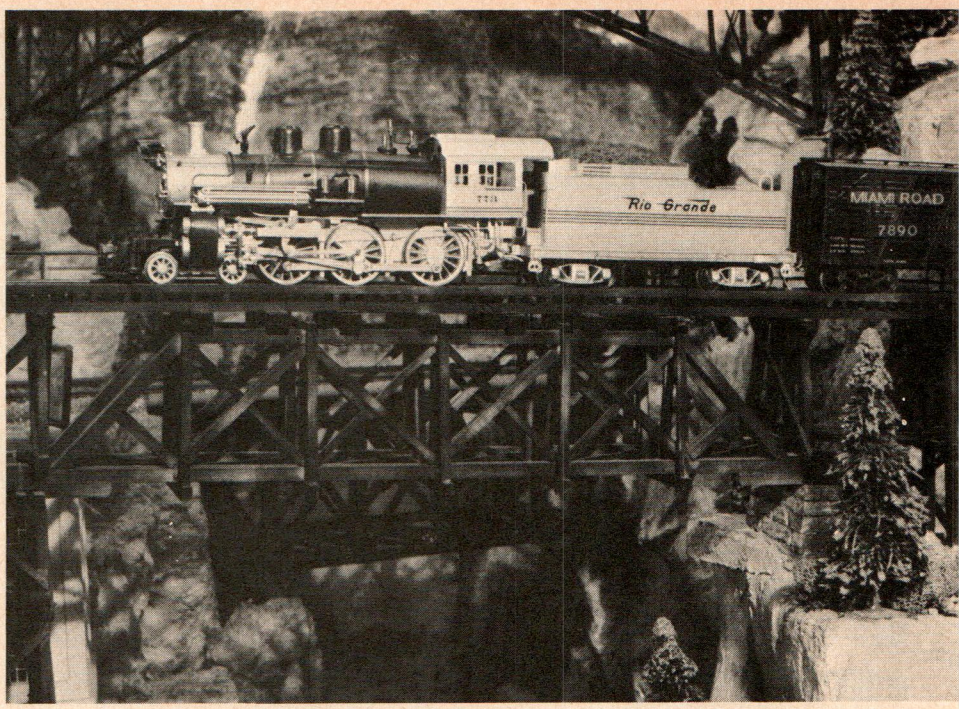
Fig. 5 shows a diagrammatic control panel for the Henderson line. Since the railroad has been divided electrically into three control sections, these are shown on the panel, in three different colors, with speed and direction controls, plus circuit breaker for protection, similarly color coded along the bottom of the panel.

The double-ringed circles are the push-button to energize certain track sections, at the extreme end of the engine-house track, or the holding parts of the hidden trackage at right. The smaller circles on the track are for uncoupling ramps if they are electrically actuated. The black rectangles across the switches are switch motor controls. They are meant to simulate the Tru-Track type, which incorporate little red and green lights to indicate switch position. However regular push-buttons may be inset in the panel, with little colored lights also set in. There are many makes of these available, but if you are interested in the smallest, I suggest you contact Baumgarten's at 220 Anacapa St. in Santa Barbara, Calif. or ask your dealer to investigate for you. (These require somewhat more wiring than the Tru-Switch controls).

Here is the table of track requirements as I count them. 12 pc. of 18"R curved track, 2 pc. of ½-curved, and 6 pc. of 1/3-curved which are included with switches and need not be bought separately. You'll need 20 pc. of full 9" straight, 6 pc. of 6" straight, 3 pc. of 3" straight, and 1 pc. 1½" straight. You'll need 2 straight and one curved treminal sections and three bumpers. As to switches, you'll need in all eleven: 5 RH and 2 LH Tru-Switches, and 1 RH and 3 LH Snap-Switches.

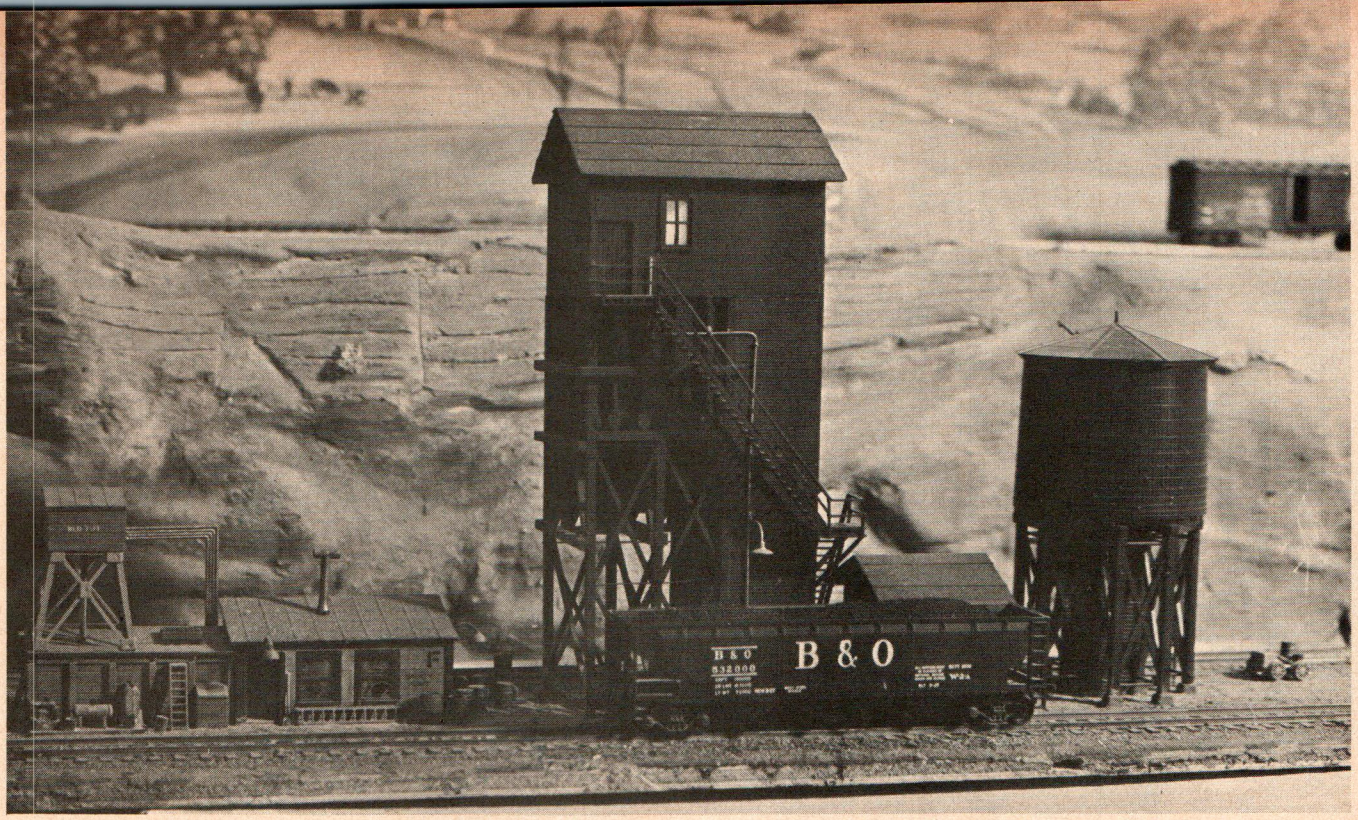
We invite all readers to submit photos of their layouts for publication in the Boomer Trail. Photos must show good modeling and originality. We pay $5 or more for all non-commercial photos used here. Send photos size 4x5 or larger to the Editor, Railroad Model Craftsman, 6 East Main St., Ramsey, N. J.

Boomer Trail

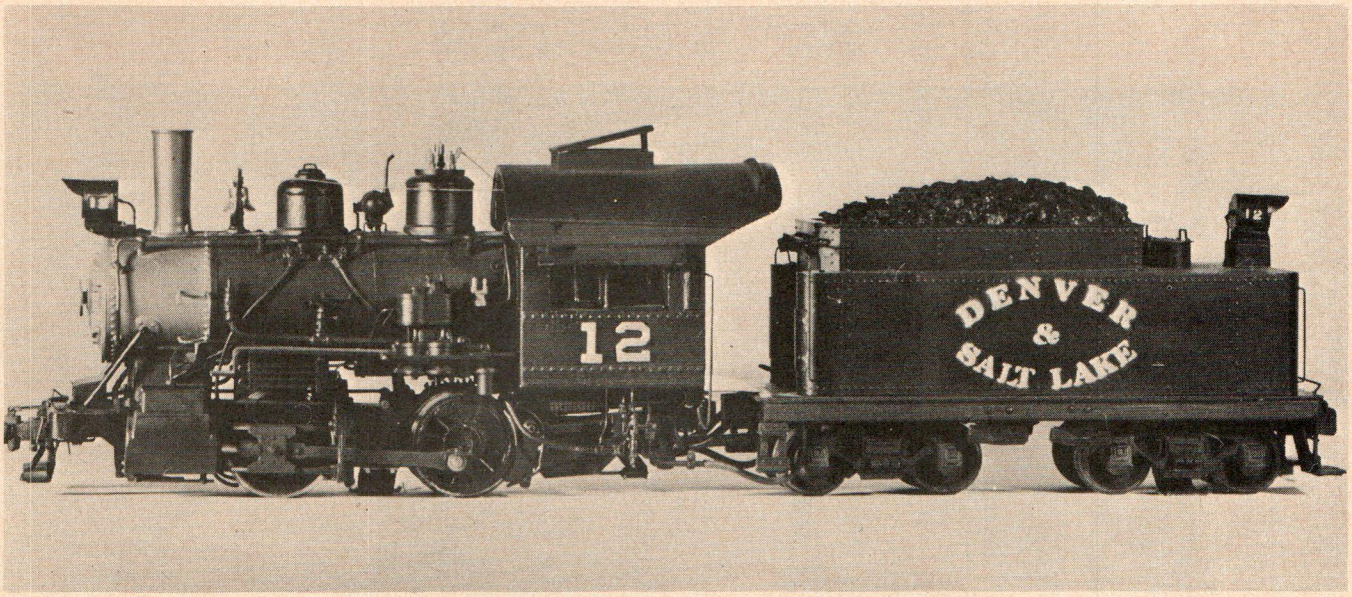


NMRA conventioneers will see this trim All-Nation O gauge 4-6-0 and 199 other locos on the 22x55' railroad of Gordon Fessler, 311 Main St., Rising Sun, Indiana 47040. Convention will be headquartered at the Sheraton-Gibson, August 17-21, Cincinnati.

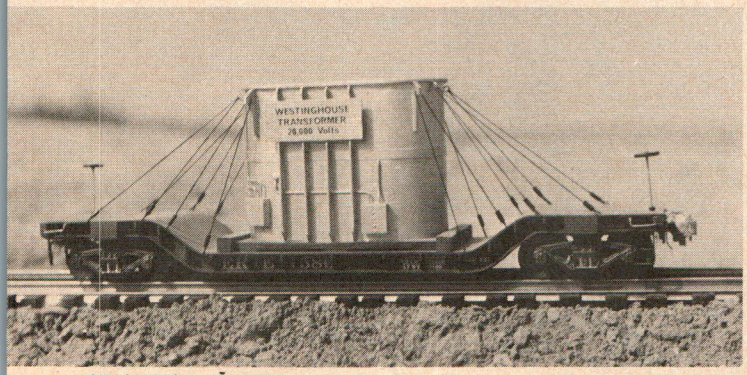
Bob Hudson's old time western village is typical of many that were, and fits nicely into a corner of his Bethel Creek pike.



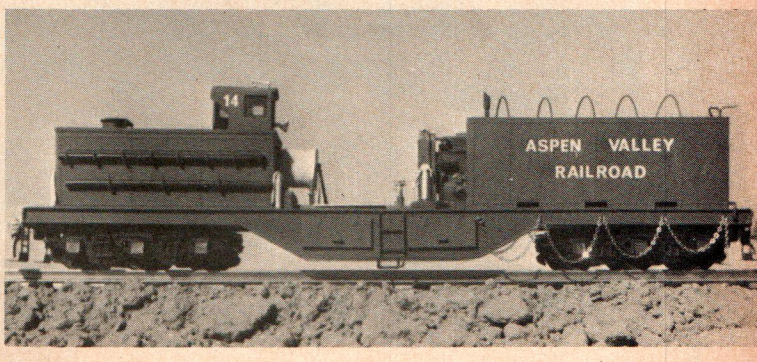
A wood Alexander Fairbanks-Morse coaling tower blends well with an Atlas water tank and a Revell sand house when mounted together with lots of minute detail. On the HO railroad of Frank Draine, 1616 Springfield Ave., Pennsauken, N.J. 08110. Frank also builds O1/4.

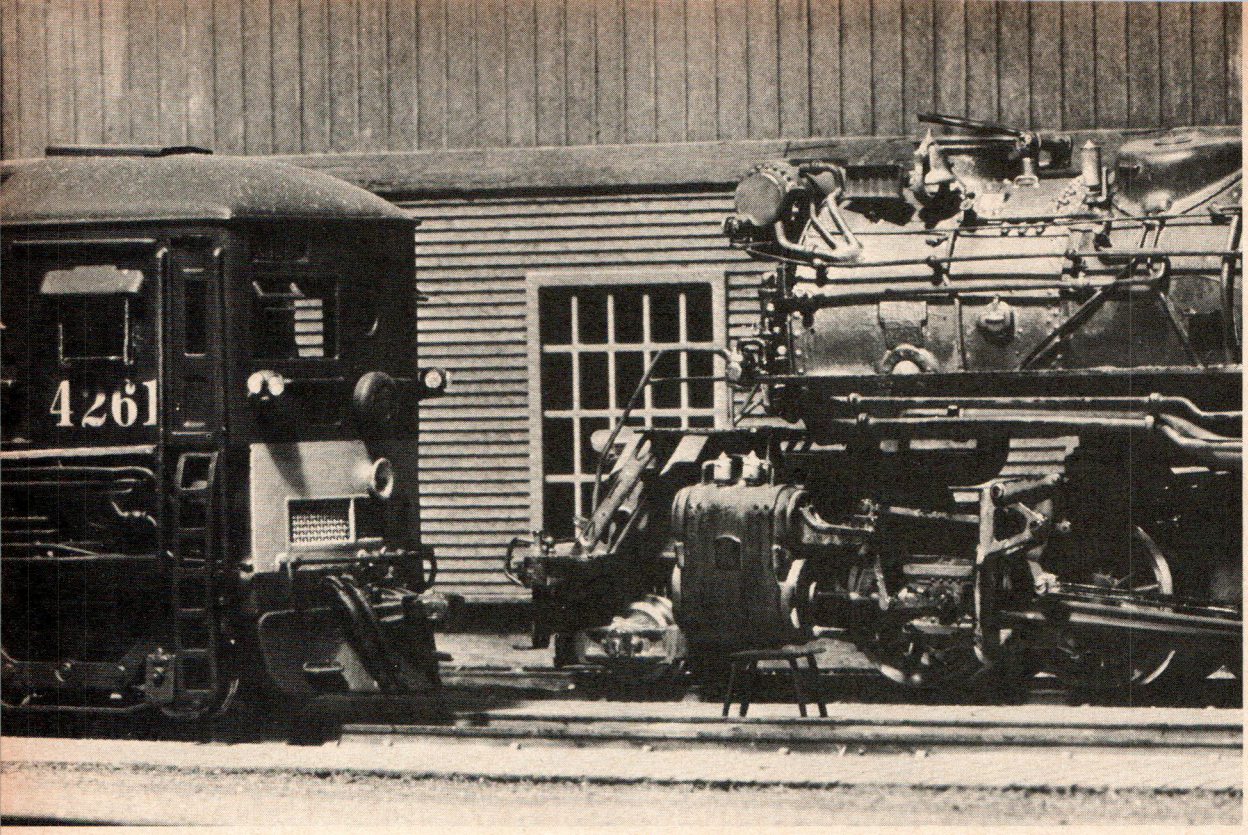


Amazingly detailed Thomas 0-4-0 switcher, given the superdetailing treatment by S. W. Huntley, Jr., Hoyt Lakes, Minn. Non-lifting injector came from Kemtron. Compressor and headlight generator are All-Nation. Domes, stacks, etc., were turned on a lathe. Tender tank is fabricated from .011" tinplate and is mounted on the original underframe. The Moffat Road did not have any 0-4-0s, nor any Baldwins, but Huntley fitted the number in as best he could.



STANLEY D. HAYES, 3423 Smith S. E., Apt. 2, Albuquerque, N. M., scratch built this New Mexico State Fair contest winner using bits and pieces of all kinds. This bed was made of wood using a bandsaw. Stan also took an award with his scratch built firecar built from plans in Jan. '57 RMC. Nozzles came from tips of old ball point pens. Sides are paper, trucks Kemtron, Monarch couplers.





WEATHER OR NOT? Cab-forward 4261 as she appeared before Paul Jansen's camera fresh from the paint shops and again as she looked after a few years of hard work, or more accurately, after she went into Jansen's weathering shop for a long, hard doing over.

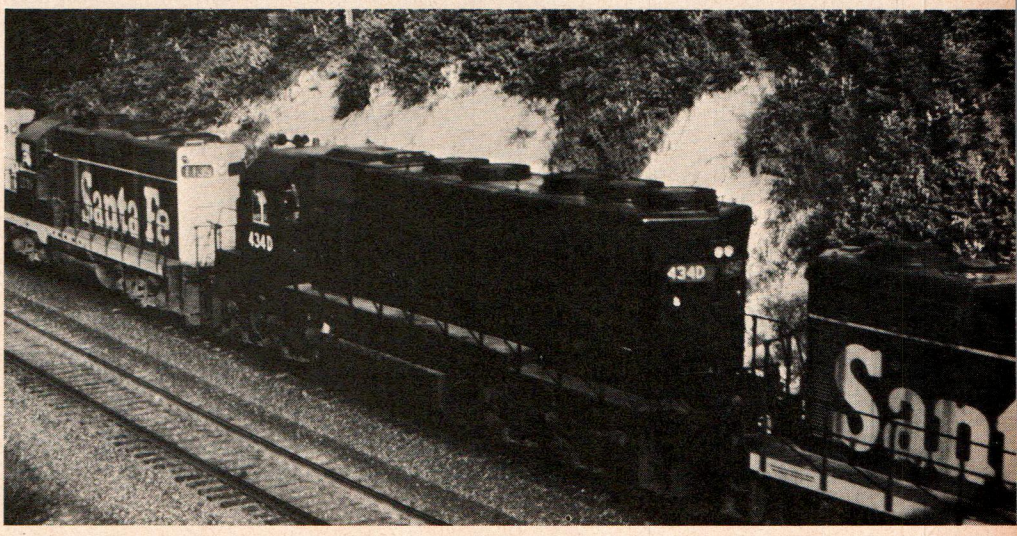
EMD'S DEMONSTRATORS

ABOVE: The biggest single engine diesel-electric in the world in 1966, EMD's 20 cylinder SD-45 is shown testing on the Chicago Great Western in March 1966. Painted bright blue and white.

EMD 434D working on the Santa Fe, Summer 1965. Black 434's differed from production SD-40's in that the 434's were actually modified SD-35 carbodies. Production SD-40 has a longer frame.

BELOW: Eng. 4351 in a left side view on the CGW at Stockton, Ill., on a snowy March 1966 night. HO model of blue and white demonstrator is offered in HO limited run Athearn replica.

A three year test program started in 1963 brought about major changes in Electro-Motive's line of diesels, with AC/DC transmission and a new, more powerful 645 engine.



by Jim Boyd

LATE in 1965, the Electro-Motive Division of General Motors announced a major change in its well established line of diesel locomotives. The old reliable 567-series engine* which had pioneered dieselization with the 1350 HP FT and souped up through the 2500 HP GP-35, was being replaced with the new 645-series engine. With aggressive competition and its reputation for reliable locomotives at stake, EMD had to be sure that the new 645 and AC/DC transmission would produce a reliable unit on the road *before* they went into production; so they set about on a three year test program beginning in 1963 to prove theories on the road with a group of demonstrators and test engines. The entire program was kept hush-hush, but railfan curiosity and unconfirmed rumors explained

* 567 cu. in. displacement per cylinder primemover that was the heart of all EMD engines up to 1966 when the new 645 cu. in. engine was made the standard. The 645 has the same stroke, cylinder spacing, and crankshaft as the 567, but it has a larger bore. The 567 came in 8, 12, and 16 cylinder models; and the 645 in 12, 16, and 20 cylinders. Either could be supercharged or normally aspirated.

COVER: SD-45 4351 testing on Chicago Great Western, and Athearn HO limited run model of 4353.

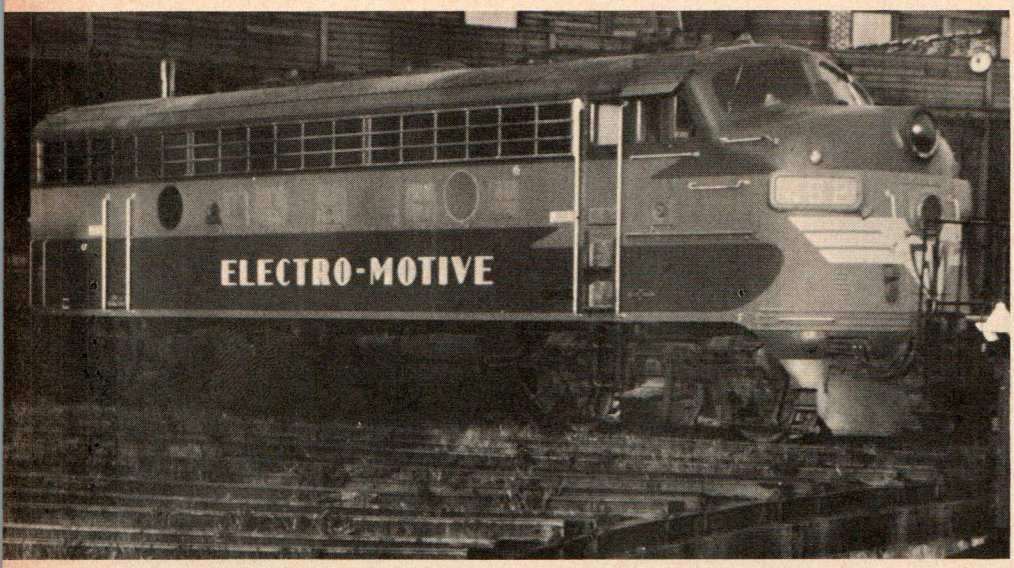
the mysterious engines that prowled various railroads. When the news was released late in 1965, the rumors were found to be surprisingly accurate.

The first engine in the program to hit the rails was the 462, a modified F-7 which was the test-bed for the AC/DC transmission. Painted a flashy red, maroon, and gold, she spent most of her career on the CB&Q. Because of her older style carbody, she aroused surprisingly little curiosity.

In early 1964, the 434 took to the rails of the Santa Fe and became a real mystery engine. Painted yellow and blue, but lettered only 434, she looked like an ordinary Santa Fe SD-35—but the Santa Fe had no SD-35's! The lack of lettering led to much speculation but the sound was the real clincher; to quote a towerman ". . . it's the loudest thing I ever heard on rails!" This same towerman later found out from some EMD men that she indeed carried a new prime-mover and that she was an "SD-40."

In late 1964 the 434 was joined by 8 more "SD-40's", the 434A through 434H, and a GP-40 #433A; all painted solid black with only a white number. (It should be pointed out that the 434's were SD-40 innards in modified SD-35 carbodys and looked quite different from the production SD-40's of today.) These engines were run both pure and mixed with the host road's units. On the Santa Fe west of Kansas City, they ran pure or leading a lash-up; but east of Kansas City they could be used only as trailing units because of cab signals. They ran pure on the Pennsy and C&O but trailed on the CB&Q.

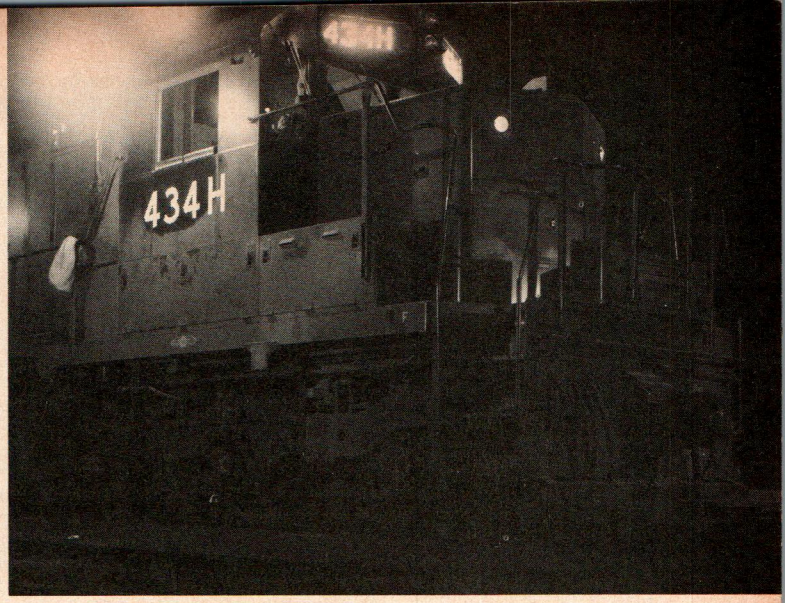
In the fall of 1965, the news was released that EMD was indeed changing models, and the doings of the 434's were not only explained, but offered



ABOVE: EMD Test Car ET-902 on the CGW with 434, 4351, and 433A on the CGW. Car is modified F B unit with crew quarters and test equipment.

EMD F-7 462 was first EMD loco to get AC/DC transmission; spent most of her time on the CB&Q. Shown at Clyde roundhouse, Chicago, '63.

434 and 434D working west through Joliet, Ill., on Santa Fe. 434's spent two years testing on ATSF. 434C and 434D passed RMC offices in winter 1966.



Black EMD SD-40 demonstrator 434G just off a Pennsy freight with 434H, pauses at 59th St. roundhouse, Chicago. These were mystery locos.

EMD 434H was an oddball with its air starter. Pennsy crew turned it off one night, found they had no battery for lights and none could operate complex air starter. They termed "H" appropriate letter for this demonstrator.

as proof of the new engine's reliability. Because of the 434's, the new 645 got more extensive road testing than any other new engine put on the market.

The EMD release also included an announcement of the biggest single engine unit ever built, the 20 cylinder, 6-motor, 3600 HP SD-45 . . . which then existed as only a prime-mover on a LaGrange test stand. In early March, 1966, the first SD-45 #4351 went road testing on the Chicago Great Western. The 4351, mu'd with the old 434, 433A, and a test car did not pull any trains, but worked against each other to test acceleration, braking and wheel slip. Unlike the 434's, the 4351 was not intended to be inconspicuous, but was painted bright blue and white with large lettering on the side.

Production on the SD-45 started in June, 1966.

RIGHT: EMD 433A painted black with white lettering, rests at Stockton on the CGW while testing. 433A also saw service on the Santa Fe.

434 and 434D team up with Santa Fe GP-20 on freight through Joliet, Ill., presenting a study in size and contrast. GP-20 developes 2000 hp. to 3600 hp of SD-45 and 3000 hp for SD-40.

Station for a Crossing

The author used two Revell depots for his junction depot. Atlas' Rockville depot is also suitable. Here the author had to model the wall between the two windows in the upper cupola section.

Two station kits are combined to create a typical junction type station such as found at railroad intersections throughout the country.

by Bruce C. Bowden

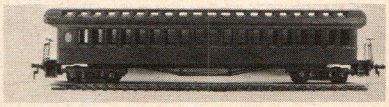
K-11 Center Flow Car.....$3.95 L/T

ANOTHER BEAUTY FROM AMBROID!

High Cube Series car by ACF Industries for handling chemicals, powders, etc. Note the special hatches and outlets that permit fast, easy loading and unloading.

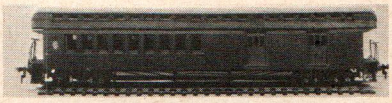
Ambroid's super-detailed HO model of the 55-foot prototype above is exactly true to scale. Designed by Northeastern's Jim Doyle, the kit has unusual end detail and hatch arrangements, which make this colorful car a welcome addition to any layout. Comes in 6 road names: GN, UP, MKT, NYC, ATSF, and ACF Industries. All basswood construction. Kitted ready to build all decals and hardware included.

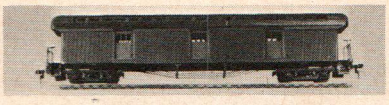
All prices retail



K-5
Ambroid
Passenger Car
$5.50 L/T

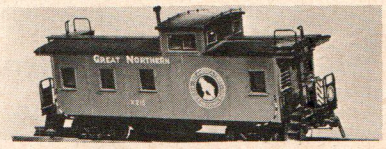
K-6
Ambroid
Comb. Coach
$5.50 L/T

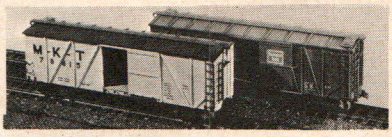




K-7
Ambroid
Baggage Car
$5.50 L/T

K-9
Great No.
Caboose
$3.95 L/T





K-12
40' Box Car
7 roads
$3.75 L/T

K-13
Livesay
Poultry Car
$3.75 L/T

AMBROID CO. *Makers of modeling's most popular cement* **WEYMOUTH 88, MASS.**

Viewed from the side, the customized station takes on a entirely different character. The cupola predominates and affords a commanding view in both directions. Depots on crossings are common.

The fondest memories of my boyhood are the times I spent around the station at West Concord, Mass. Now far removed in both time and distance I still hear the mighty Boston and Maine Berkshires thundering by on the main line, and recall the stately New Haven Pacifics gingerly crossing on the northbound spur. More than anything, I was attracted to the most wondrous vantage point the stationmaster had in his little cupola right at the apex of this railroad crossing.

Of all the station kits that have been marketed, not one has been designed to be located at an intersection. When Revell first brought out its popular kit though, with its well balanced proportions and clean straight lines, something about it appealed to me. The idea of combining two station kits to form a cupola at the corner much like the old station at West Concord quickly formed in my mind.

With the aid of a razor saw and a pen knife I laid out the two bases at right angles. This was a little tricky at first, but by manipulating the front and back walls it became readily apparent where the cuts had to be made. With the base cut and glued down, the two ends were set in place. The cuts to be made in the two front walls likewise became obvious. The portions of the front walls remaining were used to form the two short sections which make up the rear walls. The cut in the roof sections was a simple 45 degree angle but somewhat more difficult due to the shape of the castings and the fact that they were hard to hold. The only area which required filler was the short span between the windows on the upper cupola (see front view). This was easily accomplished with some light cardboard strips cut to match the size of the clapboards.

All of the plastic parts were painted and the windows installed prior to final assembly. I used the B&M color scheme of tuscon red and yellow with a slate grey roof.

The parts left over from the two kits (two ends and two rear walls) make a fine freight house or railway express building. The only thing lacking is roof material which can easily be made from card stock or preformed plastic sheets.

"O" FREIGHT CAR KITS

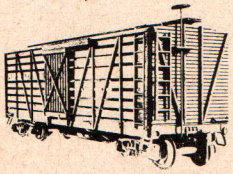
TOOL & WATER CAR
Pre-cut stripwood
5402 1/tks $12.50

40' GONDOLA
Wood & metal
3893 1/tks 6.75

45' FLAT CAR
Diecast sides, ends
3816 1/tks 4.75

32' TWIN HOPPER
Wood & metal
3896 1/tks 8.75

DEPRESSED FLAT
cast aluminum
5403 1/tks 6.95



MAIN LINE STOCK CAR KIT
Pre-cut stripwood
less trucks $9.95
(specify lettering)

TRUCKS

Scale	4 whl	$2.25
Tinplate	4 whl	1.95
Scale	6 whl	3.45
Tinplate	6 whl	2.95

TINPLATE
All kits also available with tinplate couplers, same price.

1966 'O' Catalog - $1.00

WM K WALTHERS INC
1245 N WATER ST DEPT RMC MILWAUKEE WIS 53202

G. E. Astrac Clearance

2—K-4	Transmitters—$65.00	ea.	$130.00
2—K-2	Transmitters—$65.00	ea.	$130.00
9—K-50	Receivers—$10.00	ea.	$ 90.00
1—K-40	Receivers—$10.00	ea.	$ 10.00
4—K-10	Receivers—$10.00	ea.	$40.00
		TOTAL VALUE	$400.00

Offering entire lot of new equipment for $275.00

BENTY HOBBY SUPPLIES
956 Belmont Ave. Chicago, Ill. 60657

Tell Our Advertisers
You Saw It in
RAILROAD MODEL CRAFTSMAN

Western STREET
HO BUILDING & STRUCTURE KITS
NEW 1966 CATALOG 25¢
Real-Like SCALE MODELS
Box 536 Chula Vista California

WHILE THEY LAST

FREE - A Truscale 15" ShowOff track worth 6.95 when you buy any loco listed below

PFM:		GEM:	
NKP 2-8-4	54.95	C&O 4-6-4	79.88
UP 2-8-0	49.95	C&O 4-8-2	79.88
DMIR Swth	69.95	C&O 4-8-4	88.88
Rs 2-10-0	49.95	M&P 4-6-0	32.88
M&P 2-8-0	39.95	PRR 2-8-0	49.95
SF 4-6-4	64.95	PRR 4-4-2	44.95
C&O 0-8-0	79.95	PRR 2-6-0	39.95
Shay 2tk	54.95	SP 4-4-2	44.95
Shay 3tk	59.95	RDG 4-8-4	80.88
SP#9 N3	39.95	RDG 2-8-0	47.88
Mason Bgy	49.95	NP 2-8-0	45.88

OR IF YOU BUY ANY TWO PENN LINE KITS

PRR E6 4-4-2	22.88	H9 2-8-0	25.88
PRR L1 2-8-2	27.88	I1 2-10-0	29.88

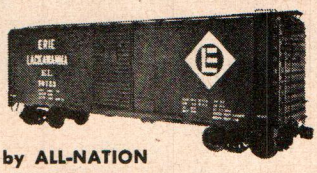
LAST CALL LIRR 2-8-0 Camelback Brass loco factory ptd 22.88

"O" GAUGERS FIND: All Nation 50' Double door Box car unptd kits complete w/o trks 9.88 or 2/17.88

Send Stamp for complete listing

TRACKSIDE SPECIALTIES
HOME OF "HO" CUSTOM BUILT ENGINES AND MODEL RAILROAD EQUIPMENT
12 Barker Rd., Somerset, N. J. 08873

NEW! ERIE-LACKAWANNA 40 ft. Steel Box Car



"O" Scale

by ALL-NATION

Now you can have an authentic reproduction of the latest Erie Lackawanna 40 ft. steel box car in "O" gauge (¼" scale). Prepainted silk screen sides realistic red background and white lettering. Reporting mark decals for the ends. All-Nation quality construction. A very popular prototype . . . you'll want one! Kit #3674.

Kit #3674 ..... $7.40
Bettendorf sprung trucks 2.50
(NMRA approved RP-25 wheels)
Matching paint, 2 oz. bottle ..... .60
At your "O" Scale Dealer . . . OR

THE ALL-NATION LINE
P.O. BOX 145, DES PLAINES, ILL.
P. S. Also available at All-Nation Hobby Shop 220 W. Madison Street, Chicago, Illinois.

SIGNALLING, Anyone?

Fewer than one in fifty model railroads display operating signals. TRI-DELT has now made it possible for you to join this exclusive group. Send 25c (refundable) for illustrated brochure describing options of this prototypical signalling system.

TRI-DELT
SOPHISTICATED ELECTRONICS
Box 20311C San Diego, Calif. 92120

GarGraves NEW
PHANTOM LINE TRACK

3 ft. flexible track to mate with O, O-27, O-72 & S gauge. Manual switches, power units and switch machines available.

Send 5c stamp for GarGraves Trackage Facts

GARDNER, The Train Doctor
2261 Dewey Ave., Rochester, N.Y.

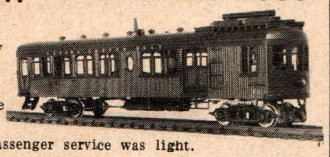
YOUR DEALER

Can show you our new line of HO trackside kits and supplies now. See him soon (or send stamp for illustrated folder).

MIL-SCALE PRODUCTS
Box 4144 Western Sta.
Milw., Wisc. 53210

NEW in 1911 and 1966

Even in the early 1900's railroads ran these units where passenger service was light.



*Heavy brass construction. *Forged individual windows. *Forged thick sides. *Engraved inserts in washroom windows. *Decals. *All geared drive — No belts. *Lots and lots of detail . . . All this and more, in a beautiful, smooth-running, brass model $35.95

MEW has many cars, locomotives and accessories at your Model Railroad Dealer's. Ask him on your next visit.

New, revised Catalog now ready. Send 35c.

Model Engineering Works
Box 261 "Unique Miniatures" Monrovia, Calif.

DEALER'S HEADQUARTERS
for MODEL RAILROADING
Kits, Track, Structures, Controls, Parts, Supplies . . .
TROST
TROST MODELCRAFT & HOBBIES
Wholesale Since 1929
3129 W. 47th St., Chicago, Ill. 60632
Area 312—927 1400

EXCHANGE PLACE

EXCHANGE and PASS listings are open to all readers. No "For Sale" or commercial listings accepted here (Classified Ads are 20c per word elsewhere in this magazine). We reserve right to edit any listing or reject any listings which are in our opinion commercial in nature. Limit, one listing every three issues. RMC cannot assume any responsibility for differences occurring between parties to an exchange. Listings cannot be repeated. Violations of standard ethics will be considered violations of postal laws and dealt with as such. Use your full real name. Sorry, no dealers. Print or type legibly. Allow 6-8 weeks for publication. Sample pass must accompany request for pass listings. No objectionable passes listed.

Send all Exchange listings to: Exchange Place, Railroad Model Craftsman, P. O. Drawer C, Ramsey, New Jersey 07446

PASS EXCHANGE

SOUTHERN NEW ENGLAND RWY.: (Printed) Tom Nelligan, 6 N. Cliff St., Ansonia Conn. 06401.

GRAND INTERMOUNTAIN PACIFIC: (Printed) Henry A. Timmons, 5540 Lathrop, Kansas City, Kansas 66104.

THE NORTH-VINE RAILROAD: (Printed) Dominic Schiavi, 183 Vine St., Batavia, N.Y.

THE DANDENONG VALLEY RWY. AUTHORITY: (Printed) I. G. Weickhardt, 20 Wynette Ave., Upper Ferntree Gully, Victoria, Australia.

SWAPPERS COLUMN

WANT: HO ga. eng., pass. cars, both old time & modern. Also trolleys & traction elect. type HO items. Randy Carter, 173 April St., Mobile, Ala.

WANT: Max Gray S.P. MT-4, MT-3. Also Dunscomb's "A Century of Southern Pacific Steam Locomotives". A. S. Menke, Box 391, Davis, Calif. 95616.

EXCHANGE: HOn3 or cash. FOR: Bassett-Lowke 2-6-0 Live Steam Mogul, good cond Will repaint. State price. Robert Barnett 17254 Signature Dr., Granada Hills, Calif 91344.

EXCHANGE: HO Red Ball "Casey Jones" 4-6-0 loco, Gem's PRR class H10 Consol. 2-8-0. Exc. cond. unpntd: FOR: PFM or Balboa Brass locos in HO or HOn3. R. Rogers, 5442 Ebell St., Long Beach, Calif. 90808.

EXCHANGE: Tenshodo, U.P. mint cond. FOR: AT&SF frt. FT's or D&RGW GP-9 like cond. Also want PFM cat. 1 & 3, LMB 4-12-2 or 4-10-2 U.P. tender, others. Robert Semichy, 246 Garden Hill Dr., Los Gatos, Cal. 95030.

WANT: Lionel pass. cars 2530 ser. & 027 pass. cars 6464 ser. box cars 6557 caboose, Lionel cat. Also other O ga. equip. before 1950. George Copeland, 821 N. Grove, Ontario, Calif.

WANT: Buddy-L loco, cars, caboose. State cond. & price. Jack Tracey, 4306 T St., Sacramento, Calif. 95819.

EXCHANGE: TT brass flexible track sections & Triang electric sws. FOR: TT Rokal items or HO electric sws. S. Blanc, 6545 Montezuma Rd., San Diego, Calif. 92115.

EXCHANGE: HO Hobbyline FM 1200 HP switcher, Kasiner Dwarf Coach, Astrodome & Obs. cars, Hobbytown Alco 2000 A-unit. FOR: Radio Control, Ham equip., etc. Raymond Stelzner, 4353 Mt. Castle Ave., San Diego, Calif. 92117.

EXCHANGE: Misc. HO and cash. FOR: Brass USRA 2-10-2 & 2-8-2. Also Pennsy 0-8-0, 4-4-0, 4-8-2 & any Penn Line, regardless of cond. Sp/5 E. J. McConnaughey, RA 15602779, 170th Avn. Co., (AML), APO 96318 San Francisco, Calif.

WANT: Body shells, F unit A&B, GP, metal only no plastic. HO. Maj. E. W. Powis, 422a Washington, Presidio of San Francisco, Calif.

EXCHANGE: 1937 Lionel 763E Gray 4-6-4 loco. & tender, whistle controller, 150 watt. trans., ser. cars w/auto cplrs., box, gond., hopper, tank, caboose, 072 track. FOR: SP brass locos. T. R. Schroeder, 1974 Curtner, San Jose, Calif. 95124.

EXCHANGE: Max Gray 3-truck shay, Gem 2-4-4-2 mallet, United 2-truck shay, Heisler, Climax. Exc. cond. FOR: Heavy SP motive pwr. Rod Aszman, 1765 Berkshire Dr., Thousand Oaks, Calif. 91360.

EXCHANGE: 35mm, 3.5 lens camera, 30-06 cal. Enfield Rifle, 7-62mm Moisen Rifle. Junker Penn Line 2-8-0 FOR: Camelbacks, United Sierra 2-6-6-2 or brass HOn3 eng. Walt Spengler, 1013 Hawthorn St., Vandenberg AFB, Calif. 93437.

WANT: Thomas Industries HO ground switch throws. Wm. Johann, 1322 Mauna Loa, Tustin, Calif.

EXCHANGE: 1958, 59, 60, 61 U.S. proof sets, better grade U.S. & foreign stamps, U.N. FDC & stationary HO equip., brass track. FOR: Locos, N/S track, pwrpk, Airbrush. Earl Steiner, 1641 E. 86th Pl., Denver, Colo. 80229.

WANT to buy pre-war Tootsie Toy cars, trucks & aeroplanes, regardless of cond. Please state price. Bill Hall, 285 Auburn Rd., West Hartford, Con. 06119.

EXCHANGE: Early Joy Line clockwork pass. set, 654 tank, 659 dump. For: Lionel 259 loco & tender, 652 gond., 656 cattle, 655 box, all w/nickel journals & inserts. David Ashworth, 910 N Franklin St., Wilmington, Del. 19806.

EXCHANGE: Brass HO locos & back issues RMC & MR. SAE for list. FOR: Pre-war trains. Jack Windt, 1939 Golf St., Sarasota, Fla.

EXCHANGE: List Std., O ga. SAE. FOR: Lionel 8976, 763E, gray, 250E, 256, 4, 783, 753, 2624, 715 Sunoco, 156, 156X, others. Also trolleys, cat. Tom Johnson, 815 E. Olive St., Arlington Heights, Ill. 60004.

EXCHANGE: Tyco Pacific 4-6-2 Pennsy, RTR, Factory blt, other eng. by AHM & Revell. FOR: AHM Berkshire, very good cond. SAE. Carl Spars, 6035 S. Spaulding, Chicago, Ill. 60629.

EXCHANGE: Drawing instruments, complete sets or indiv. pieces, Skil ¼" drill, micrometer calipers, slide rules. FOR: Rapido cars, locos, track, sws., uncplrs, other N ga. John Ahring, 840 Pershing, East St. Louis, Ill.

WANT: Revel SW-7's & Alco. Varney F-3's ABA unpwrd. Mantua Sharks, A-B's. Athearn Hi-F Drives, motors not important. RMC Mar. 64, Oct. 62, Nov. 63. Bob Sellin, 14603 Jefferson, Harvey, Ill.

EXCHANGE: United NKP 2-8-4, Fuji USRA 0-8-0, Tenshodo SF 4-6-4, Steam neg. & pix. FOR: Brass PRR eng., Brass diesels by Tenshodo. Dean Givler, P. O. Box 17, Naperville, Ill. 60540.

WANT: Super-O track, cars, bldgs. George Popelka, 8035 S. Mobile, Oak Lawn, Ill.

WANT: A. F. Frontiersman locos & cars. State price & cond. Larry Urbanski, 7829 S. Menard, Oak Lawn, Ill.

EXCHANGE: HO Gem T&P 4-6-0, S.P. 4-4-2, S.F. 2-10-2, CB&Q 0-8-0, Athearn and Roundhouse car kits unblt. SAE. FOR: "Century of Southern Pacific Steam Locomotives" by Guy Dunscomb. Premium for A-1 copy. L. E. Karr, 805 W. 9th Ave., Marion, Iowa 52302.

EXCHANGE: Railroad books FOR: HO Brass. SAE for list. Arthur Weiland, 15016 Schuyler Ave., Cleveland, Ohio 44111.

EXCHANGE: Tenshodo Crown GN 2-10-2, Takara Wabash 2-6-0, Mantua Shark Nose "A" w/dbl. mtr., Mantua Streamliners, exc. cond. FOR: Tenshodo GN 0-8-0, GN 2-8-0 — United Frisco 2-10-0. T. J. Strall, 3332 Northwood, Toledo, Ohio 43606.

EXCHANGE: Athearn plastic cars, locos; Mantua Big Six switcher, misc. structures & acc. FOR: Pix of Mexican & other Latin Amer. RRs; Airfix manual 12" turntable; Ambroid tobacco hogshead car. Milton Braselton, 2709 Plymouth Lane, Oklahoma City, Okla. 73120.

WANT: Rosebud Kitmaster Plastic Engine Kits. J. Burkett, 1517 N. E. 8th St., Portland, Ore. 97232.

WANT: Lobaugh Greenbrier, kit or expertly blt. Also Exakta or Central Lines pass. car kits. Cash or trade. Bert Halley, Box 693, California, Pa.

EXCHANGE: Lionel 022 sws. FOR: Marx 034 r.c. sws., Erie, Pa. area. Daniel Sullivan, 2751 E. 30th St., Erie, Pa. 16510.

WANT: Thomas locos, cars (particularly Civil War); Central Lines, 1898 old Timers; Great Western Old Time Cars; All-Nation 4-4-0 (kit 21R); all O ga. kit or blt. D. H. Cornish, 10169 Sherman Rd., Chardon, Ohio 44024.

WANT: Lionel # 1766, 1767, 1768 Std. ga. pass cars, Gunmetal #392 & 400 locos, A.F. #4689 Pres. Spec. Set, early A.F. castiron windup trains. Robert Heffner, 194 Kleber Rd., Glenshaw, Pa.

EXCHANGE: Complete Super O frt. yd., sws, bumpers, ZW trans., uncplrs., trsfr. table, track. Also Lionel frt. cars, lited cabooses, acc. FOR: "O" locos only. R. E. Campbell, 19 W. Turnbull Ave., Havertown, Pa.

EXCHANGE: Austin custom pntd. & lettered S.P. 2-8-0, craftsman type car kits. FOR: NKP 2-8-4, United B&O 2-8-0, Balboa strm. P-10 heavy 4-6-2. Tom Paunovich, 1307 Fremont St., McKeesport, Pa. 15132.

EXCHANGE: Several eng. FOR: Mantua Goat, Kit or RTR, good cond. R. G. Miller, 12 Hillside St., Mohnton, Pa. 19540.

EXCHANGE: A.F. 4-6-2 Royal Blue loco with tender. 10 yrs. old, all metal. Needs slight repairs. FOR: HO AHM 2-8-8-2 artic, mallet; or Rivarossi 4-8-82 cab fwd. loco, good cond. Thomas Barger, 8715 Patton Rd., Phila., Pa. 19118.

EXCHANGE: Hobbyline PRR 0-4-0 A-5 kit (several). FOR: Globe or Athearn boxes metal, craft type kits. Also Pacific Slope RRs & This Was Railroading. FOR: Similar Eastern books, steam neg. A. Kovacs, 510 S. Franklin St., Wilkes-Barre, Pa. 18702.

WANT: 700E tender & parts, 6464 ser. boxcars, Rail Chief cars, FM, F7, GP9 diesels, Congressional set, Can Pac. set, #763, 8976, Lionel 072 scale frt. cars. Anthony Unis, 15 Edgemere Dr., Yardley, Pa. 19067.

EXCHANGE: Exc. or mint HO; AMT 1/25 scale race layout complete, mint cond. FOR: Leyghton-Paigelite Model M Panel or other high freq. pwr. unit; Penn Line T-1 Duplex; Herkimer "OK" 80' pass. cars. Roland Davis, 2520 22nd St., Lubbock, Texas.

WANT: O scale Max Gray S.P. 2-6-0, Lobaugh S.P. Mike & 0-6-0, Scalecraft S.P. 4-6-2 & other O scale S.P. equip. State price & cond. J. W. Bailey, Box 145 Simonton, Texas 77476.

EXCHANGE: Lionel std. ga. #390E, O ga. Wabash A&B units, B&O units other std. & O ga. SAE. L. D. Moore, 121 Flagg Rd., Deep Creek, Chesapeake, Va.

EXCHANGE: AHM B-L 2 (C&O) and caboose. FOR: Athearn std. pass. cars. (Pennsy or undec.) Frank Deane, III, 2003 Haviland Dr., Richmond, Va. 23229.

EXCHANGE: PFM-United 90-2 Shay HO, mint cond., spray-pntd., no longer mfg. FOR: Mint cond. United-PFM "B-3" Shay. Will consider no other offer. John Killoran, 1605 Quarrier St., Charleston, West Va. 25311.

EXCHANGE: Boilers, chassis or tenders in "OO". FOR: Nason Hudson Boiler, tender, Consol. chassis, Scalecraft frt. or pass. trucks. FOR: Scalecraft tender trucks. Charles Davis, 3663 McCall, Bremerton, Wash.

EXCHANGE: Athearn, B&O, F-7, GP-9, Milw. F-7, AHM, 2-8-0. FOR: Brass Steam eng. or Varney, Athearn, B&O, N.H., RPD, Penn Line N.H. obs. Tyco B&O DBS. FOR: Penn Line std. Mario Morrone, 3545 21st Ave., Kenosha, Wis.

EXCHANGE: Akane C&O USRA 2-6-6-2 pntd.. FOR: United Sierra 2-6-6-2 or United USRA 2-8-2. Wayne Brittain, Box 866, Sault Ste. Marie, Ont., Canada.

WANT: Baldwin diesel switcher (HO) by Kemtron. State cond. W. Cooksley, 57 Linstedt St., Sault Ste. Marie, Ont., Canada.

EXCHANGE: Red Ball HO Mallet 0-4-4-OT, good cond. FOR: Tyco Old Time 4-6-0 in Tyco C&FW colors, good running cond. Also want Canadian equip. in HO. Your list for mine. Stan Smaill, 3495 Patricia Ave., Montreal 28, Que., Canada.

WANT: Lionel 613, 614, 615, 659, 814R, 815, 816, 820, 2660, any type cplrs. Cond. not important. All letters ans. Reg Watson, 1 Summit Ave., Mooroolbark, Victoria, Australia.

WANT: Tenshodo GP-7, GP-9, SD-9. Please state cond., rd. name, price in first letter. John Yates, 125 E. Oakland Ave., Oaklyn, N. J.

WANT: Pix, timetables — other material from Maine 2-ft. ga. RRs. Greg Pulis, 48 Church St., Ramsey, N. J. 07448.

WANT: Lionel solid rail (T-Rail) track & sws., fish plates, nuts, bolts, etc. Tender for #8976 full scale switchers. State cond. & price All letters ans. Peter Reavey, 59 Main St. Sayrevile, N. J. 08872.

EXCHANGE: AF "S" ga. 4-4-0 w/t, flats, tank car, gond., caboose; 6 straights, 12 curves "S" ga.; trans. FOR: HO 2-8-2, 4-6-2 or 2-10-2, 0-4-0, or 2-8-4, 2-6-0 or others. M. E. Shay, 114 West B, Kingman, Kans. 67068.

EXCHANGE: Lionel acc., eng., cars, AF eng., cars. FOR: Lionel 2600 pass. cars, scale frts, 700, 763 Scale Hudsons, F-3 diesels. Dick Rose, 238 Westwood Rd., Manhattan, Kansas 66503.

EXCHANGE: Ambroid's 1st ser. 1/5000 kits #1 thru #6, exc. cond. #4 or #5 kit FOR: 1955 U.S. half-dollar in fine cond. Also want other U.S. coins. Ian Forbes, NAMTD 1011, N.A.S., Patuxent River, Md. 20670.

WANT: Used HO 2-rail DC continental European prototype equip; Fleschmann, Hornby (French). Jouef, Liliput, Piko, Rivarossi, etc. Allan Pommer, 898 Hyde Park Ave., Hyde Park, Mass. 02136.

EXCHANGE: HO Layout, steam, diesel and interurban; structures, track, other odds and ends. FOR: Lionel O and 0-27 equip., espec. Budd RDC cars, GP-7 diesel, pass cars. SAE. Brian Cudahy, 38 Webster Dr., Holliston, Mass. 01746.

WANT: O ga. scale 2 or 3 Rail Scale Model Railways Inc. or Megow Corp. New York Central 2-8-0 in orig. cond. George H. Gregory, 523 N. Monroe, Traverse City, Mich. 49684.

WANT: Marx or other make F-3 or F-7 units in Rock Island colors. Rivarossi FM A&B units in Wabash and Texas & Pacific colors. John English Alco A.B.'s. Will pay reasonable price. Eugene Mueller, RR #1, Rock Creek Rd., High Bridge, Mo.

EXCHANGE: Ambroid 1/5000 ser. 1 #1, Athearn cars, other HO. PFM Brass HOn3 obs., other HOn3. FOR: PFM DRGW GP-9, GP-35, M-67, Balboa HOn3 K-36 pass cars, etc. Brian Holtz, 9442 Mary Glen Dr., St. Louis, Mo. 63126.

Interested in collecting European O ga. trains. Prefer Marklin, also others. Would also like to correspond with you, receive lists & info. Loring Roover, 5715 S. Broadway, St. Louis, Mo. 63111.

WANT: L&NE diesel pix, timetables, etc. Erie diesel pix. Varney "Metal" F3 A's & B's, Hobbyline Alco diesels, frt. & pass. cars. Penna. Scale Models FM Rd. switcher. Jerome Rosenfeld, 133 Dulles Dr., Dumont, N. J. 07628.

WANT: International Boston & Albany class D-la 4-6-6T. Cond. not important Send details & price. John Hollner, 12 DeVoe Dr., Albany N. Y. 12205.

EXCHANGE: Transistor-twin-t units, throttles, diesel horns, variacs, relays, etc. SAE. for list. FOR: Tru-Scale N/S #6 turnouts mtd. or kits, milled rdbd. or HO. D. H. Stiles, 24 Franklin St., Brentwood, N. Y. 11717.

EXCHANGE: Bowser Pacific (NYC), Penn Line F7, Varney SW-7, Athearn standards, Gilbert A49 Erector motor, many parts for HO. FOR: JC kits HO2, HO2M; CV pass. trucks. Edward Davis, 1937 Walton Ave., Bronx, N. Y. 10453.

EXCHANGE: Lionel #6464-375 C. of G., 6464-450 G.N., 6464-400 B&O, 6468-25 N.H. (4 doors). Also 2055 Hudson lite/smoke. Tender needs repair. What have you to trade? Edward Heidenrich, 1858 Cornelia St., Brooklyn, N. Y. 11227.

WANT: AMT-Kusan 36406 Checkerboard box car. Lionel locos. 205, 219, 221, 222, 224, 227, 228, 229, 213, 211, 230, 634. S. Fe yellow stripe cab. Dr. S. E. Brown, 469 W. Gray, Elmira, N. Y.

A handicapped 18 year old collecting pix of trolleys, interurbans & trains. Also wants list of trolley & RR museums. Robert Oehmer, Jr., 97 Washburn Ave., Freeport, N. Y. 11520.

EXCHANGE: Mantua Mogul, exc. cond.; Kemtron domes, stock, lights, tender body, cylinders; CV valve gear; switcher pilot; spray pntd., w/engineer. FOR: PFM geared eng. John Weber, 234 Brookside Ave., Freeport, N. Y. 11520.

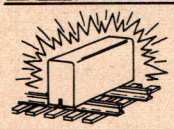
WANT: Mantua Baldwin Shark Nose diesel & Gilbert Alco rd. switcher diesel HO ga. State cond. & price. G. Witschard, 2394 Bedell Rd., Grand Island, N. Y. 14072.

WANT: Max Gray On3 D&RGW K-28, PFM On3 DSP&P 2-6-6T. Daniel Reagan, 22A Shirley Lane, Jamestown, N. Y. 14701.

WANT: Any one of the first thru tenth editions of the "Car Builder's Directory". H. B. Briggs 20 Woodland Dr., Kings Park, L. I., N.Y. 11754.

WANT: Pix of NH class DER, 3x3, also info. State price in first letter. Robert Calandresa, 72 Chatsworth Pl., New Rochelle, N. Y. 10801.

O GAUGE LOCOMOTIVES
STEAM, DIESEL, ELECTRIC, SWITCHES AND SPECIAL TRACKWORK
Send 25¢ for Catalog
BALDWIN MODEL LOCOMOTIVE WORKS
P. O. Box 161 STRATFORD, CONN.


NEW
TRACK
TEST LIGHT
HO-N-TT-S-O
#550 ONLY 98c (Choice of colors)
At your Dealer's NOW. Also see all the fabulously realistic Campbell HO Kits, with precision wood parts, and micro-detailed castings. Illustrated Catalog 35c (coin).

Campbell Scale Models
P. O. Box 121C, Tustin, Calif.

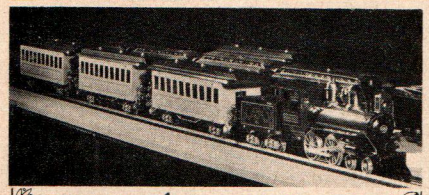
"EXPERIENCE MAKES THE DIFFERENCE"
Did you know . . . that the FIRST super-detailed all-brass top-quality models were imported by Max Gray in 1952? This continuous dedication to the art of modeling perfection is living proof of accumulative skill and your "Green Light" to reliability and enduring value. See your favorite hobby shop dealer or send self-addressed envelope for direct-by-mail cataloging service. Specify Gauge, please. (O, HO, ON-3)

MAX GRAY
BOX 757 • SANTA CLARA, CALIF.

HOBBY DEALERS,
Keep 'em Rolling!!
It's full steam ahead when you discover Western Model can supply you Model Railroading equipment, rolling stock and accessories.
Try us and see!!
Our personalized service covers 11 Western States, Hawaii and Alaska. There are 3 convenient locations for clear track delivery.
SINCE 1933
WESTERN MODEL Distributors
2080 East 25th St., Los Angeles, Calif.
1465 Factor Ave., San Leandro, Calif.
2602 West Encanto Blvd., Phoenix, Ariz.
Sales to the Trade Only

"FINISHING TOUCHES"
Let "Finishing Touches" provide your tiny, difficult super-detail pieces — save your time for the big projects.
HO "Finishing Touches" catalog, 25c (refundable)
O "Finishing Touches" catalog, 25c (refundable)
SELLEY, INC.
746 Clay St. Winter Park, Fla.

MODEL
STRUCTURAL SHAPES
OF BRASS
LIGHTL
ANGLES — BEAMS — CHANNELS
H COLUMNS — TEES — ZEES
All sizes to any scale — made in U.S.A.
Flat, Round & Square Bars • Sheet Stock & Tubing
SPECIAL SHAPES CO.
5007 BELMONT RD., DOWNERS GROVE, ILL.
See your dealer or write for Catalog

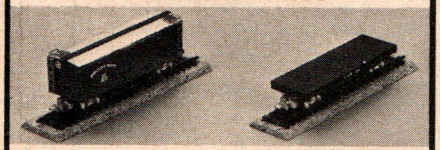

STANDARD (2⅛") GAUGE TOY TRAINS
ONE OF ONE THOUSAND SETS. EXCELLENCE IN STANDARD GAUGE DESIGN AND CONSTRUCTION FOR REMARKABLY LOW COST. SEND $1.00 FOR YOUR CATALOG TO:
THORLEY HOOPLE TOY COMPANY
1044 WEBSTER ST., PALO ALTO, CALIF. 94301

Add trackage to your yards with our 3 way Lap Switch. Switch made with No. 8-10-6 frogs. No car or loco restrictions.....$15.50

OTHER CUSTOM SWITCHES

No. 5, 6, 7, 8, 10 Right or Left	$ 4.50
No. 6, 7, 8, 10 Crossovers	8.95
No. 6, 7, 8, 10 Double Crossovers	20.50
Switch Kits	2.95
Slip Switch	24.95
No. 6, 7, 8, 10 Curved Switches	5.95
Curved Xings	5.95
10° to 90° Xings	4.95

HOn3 and Dual gauge also available. Mounted on Tru-Scale or fibre roadbed. Choice of nickel, silver or brass rail. Code 100 or code 70.
NEW! Curved Crossovers $15.00
SATTLER'S HO DEPOT
1510 Cedar Ave. Cincinnati, Ohio 45224
Dealers' Inquiries Invited

N-Scale Kits

D6200 Box Car $3.50
D6220 Flat Car 3.00
Kits are made from scribed wood veneer, trucks are brass, wheels are nylon, couplers are compatible with Arnold-Rapido products. And five more car kits to choose from. Also eleven Structure kits of 1/32 veneer, including Station, Engine House, and Coaling Station, and many more N-Scale items. Send SAE for complete catalogue and price list.
Dealer Inquiries invited
SWIFT LINE
2143 E. Huntington Dr.
Duarte, Calif. 91010

WANT: Frame, cylinders, retainer plate for Tyco 0-6-0. Boiler, cab from Shifter or Big Six. Also Big Six, Shifter junkers & parts. W. Elmore, 134 W. 109th St., New York, N. Y. 10025.

EXCHANGE: Lionel eng., cars, access. Also Scale eng. & cars. FOR: Ives 1694, 1764. Pass. cars # 1695, 96, 97, 1685, 6, 7. Red & Blue. Any other Ives or Lionel pass. cars. SAE. Richard Corser, Phelps, N. Y.

EXCHANGE: AF "S" ga. 566 whistling billboard, 693 track locks, (1 pkge), 750 bridge, 772 water tower, 780 trestled, 799 talking sta. All exc. cond. FOR: Pre-war Lionel O set. Robert Parker, 508 S. 1st St., Smithfield, N.C. 27577.

EXCHANGE: Lionel std. ga. eng. #7, #42. Max Gray O ga. water tank, sanding tower, cars. FOR: PRR Juniata Shop Plates. W. A. Grimm, 204 Gregory Ave., West Orange, N. J.

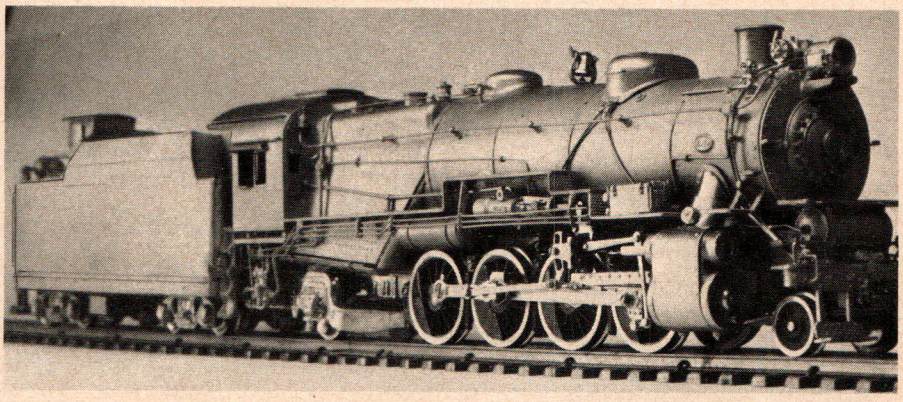
EXCHANGE: 1½" ga. Little Engines 0-6-0 switcher chassis less cyl. valve gear & rods. FOR: Any 1" ga. live steam eng. or parts in any cond. Pix. George Schongar, Jr., 42 Worthington Blvd., Troy, N. Y. 12180.

WANT: Doepke Outdoor Railroad, sws. & rolling stock, O or std. ga. Tinplate. Buy or trade. Warren Schuch, 8 Elf Rd., West Orange, N. J.

EXCHANGE: 700K w/tender, 226E w/tender, 2363 Ill. Cent. AB. Also 6220 diesel switcher w/bell, 2329 Virginian rectifier. FOR: Lionel 0-6-0 switch eng. #227, 228, 230, 232, 708. SAE. John Cangelosi, 2500 Webb Ave., Bronx, N. Y.

EXCHANGE: Snorkeling Mask, Nemrod Asteria-Purging, Super; Snorkel Tube, blue Aquatic; U.S. Divers Swim Fins, yellow, size 8-10. FOR: What have you to offer? Ed Moran, 3300 Netherland Ave., Bronx, N. Y.

TEST TRACK


Pennsylvania L-1s 2-8-2 in new United Model available through Pacific Fast Mail in HO features Cal-Scale investment castings.

Pennsylvania RR L-1s 2-8-2: HO

Mfd. by United Scale Models for Pacific Fast Mail, P. O. Box 57, Edmonds, Washington 98020.

Pacific Fast Mail's model of the Pennsylvania's famed L-1s 2-8-2 Mikado locomotive is a production model from the United Scale Models plant in Japan. Curiously, the companion K-4s Pacific, a PFM stalwart for some years, has quietly disappeared from the catalog for the present. Both the K-4s and the L-1s utilize the same boiler and many fittings.

The L-1s was a mainstay in Pennsy freight power, with 369 of the brutes being built at the Pennsy's big Altoona shops and another 205 by Baldwin. They developed a tractive effort of 61,470 pounds, had 62 inch drivers, and weighed 320,700 pounds less tender.

The L-1s was designed to use as many K-4s parts as possible, and proved to have a tractive force 25% more than the H-9s Consolidation. The first unit was built in 1914.

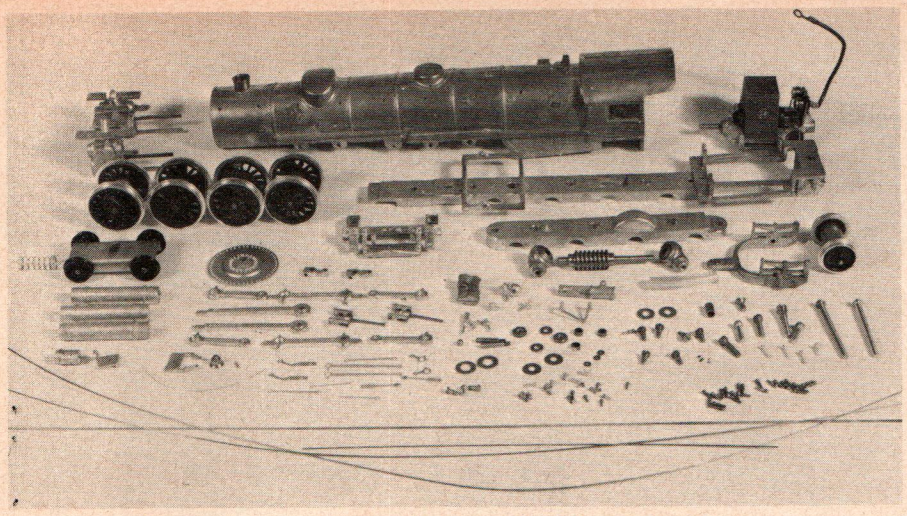
During the War, three of the units were sold to the Santa Fe, where they saw relatively little use prior to scrapping. Another became Lehigh & New England No. 503.

The all-brass model is fitted with footboards, front and rear, and has a doghouse on the tender. The model has sprung 62 inch drivers, wireless drawbar, and a Pittman DC-70X motor. Castings are U. S. made by Cal-Scale and are superb.

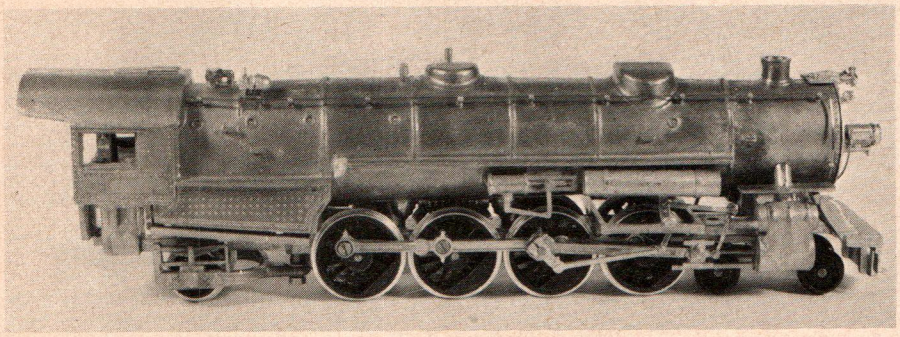
PFM has established an enviable record for the pre-testing and condition of their locomotives when they leave the Edmonds shops. PFM engines, or any brand, can be knocked around in transit to the dealer, and therefore, may require some minor adjustment here and there. Standing on a dealer's shelf for an extended period can also cause slight corrosion of contacts which will rob any locomotive of its zip.

The L-1s required a slight loosening of the pilot truck frame which was causing a wheel bind (Another identical model spot checked was perfect). After remedying and lubrication, the model would start rolling at 2.5 volts and .2 amps. At 12 volts, she ran a realistic 60 mph drawing an amperage of only .3- .4 which is very good. After a little running-in, the mechanism was quiet and very free running.

PFM, incidently guarantees its models and the guarantee should always be consulted before any action is taken. It's rare when it will be needed. The L-1s at $49.95 ready-to-run unpainted at PFM dealers is an excellent value. JWK.



Over 100 parts make up the Bowser 4-8-2 locomotive kit; shown laid out. Assembly is not difficult when instructions are followed in step by step fashion. Tender is not included with kit.



Right side view of Bowser Mountain locomotive prior to addition of piping and small detail parts. Boiler is special Cary casting.

4-8-2 Mountain Kit: HO

Mfd. by Bowser Mfg. Co., 21 Howard St., Montoursville, Pa. 17754.

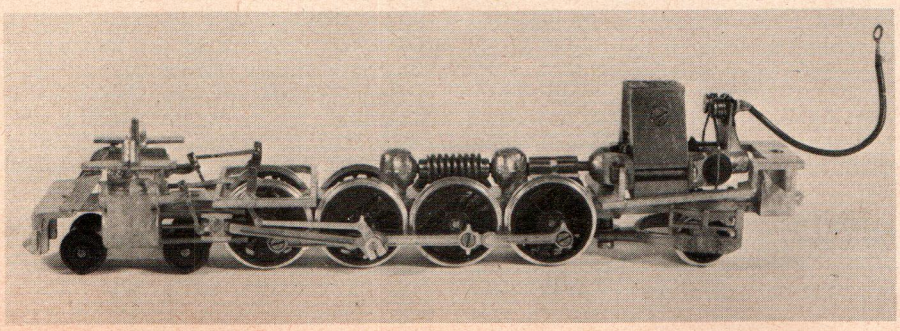
It has been many years since the first new, all-metal, American-made HO locomotive kit has been put on the market. There have been reissues, conversion kits, and so on, but to our knowledge, no kit that could be called really new. The Bowser Mountain kit is new, although as with all kits by established locomotive kit makers, parts from other locomotives must necessarily be used: power reverse, pilot assembly, air tanks, etc.

The superstructure is a completely new casting by Cary, fully drilled and tapped where required. It has such cast-on parts as cab, running board, domes, stack, and open turret. Many other parts are standard Cal-Scale investment castings, including the boiler front. Piping has been left off the boiler so the modeler can arrange it to suit his specific prototype. By adding them yourself, the pipes stand out full round, rather than half round as they would be if cast on. The photos of our model show it as it looked prior to addition of any piping, making it easier to visualize the engine for various prototypes.

The instruction booklet included with the kit is complete, with plenty of diagrams including top, right, and left views of the locomotive.

Having assembled locomotive kits for many years, we brashly went ahead and built our model without giving the booklet more than a glance. This resulted in at least one booboo

Bowser Mountain mechanism should operate smoothly before adding superstructure. Inside of valve gear hanger and inner portion of firebox should be filed to clear flanges of No. 1, 4 drivers.



RAILROAD MODEL CRAFTSMAN

Back Issues Still Available

Complete your library now. Many issues in short supply.

Here is the latest complete listing of all available back issues of RAILROAD MODEL CRAFTSMAN. Here is a wealth of material to solve every model railroad problem: layout design, loco and car drawings, layout photos, construction, and more. Issues dated earlier than April 1948 also contain material on model hobbies in addition to model railroading.

- ☐ 1947—February
- ☐ 1947—September
- ☐ 1947—October
- ☐ 1948—February
- ☐ 1948—March
- ☐ 1948—April
- ☐ 1948—June
- ☐ 1948—July
- ☐ 1948—October
- ☐ 1949—October
- ☐ 1951—April
- ☐ 1951—May
- ☐ 1951—July
- ☐ 1952—March
- ☐ 1952—October
- ☐ 1952—December
- ☐ 1953—March
- ☐ 1953—June
- ☐ 1953—July
- ☐ 1953—September
- ☐ 1953—October
- ☐ 1953—November
- ☐ 1955—March
- ☐ 1957—May
- ☐ 1957—June
- ☐ 1957—October
- ☐ 1957—November
- ☐ 1958—January
- ☐ 1958—April
- ☐ 1958—July
- ☐ 1958—August
- ☐ 1958—November
- ☐ 1958—December
- ☐ 1959—January
- ☐ 1959—February
- ☐ 1959—March
- ☐ 1961—October
- ☐ 1962—March
- ☐ 1962—May
- ☐ 1962—June
- ☐ 1962—July
- ☐ 1962—August
- ☐ 1962—September
- ☐ 1962—October
- ☐ 1962—December
- ☐ 1963—January
- ☐ 1963—February
- ☐ 1963—April
- ☐ 1963—June
- ☐ 1963—July
- ☐ 1963—August
- ☐ 1963—September
- ☐ 1963—October
- ☐ 1963—November
- ☐ 1963—December
- ☐ 1964—April
- ☐ 1964—May
- ☐ 1964—June
- ☐ 1964—July
- ☐ 1964—September
- ☐ 1964—October
- ☐ 1964—November
- ☐ 1965—January
- ☐ 1965—February
- ☐ 1965—April
- ☐ 1965—May
- ☐ 1965—June
- ☐ 1965—August
- ☐ 1965—September
- ☐ 1965—October
- ☐ 1965—November
- ☐ 1966—January
- ☐ 1966—February
- ☐ 1966—March
- ☐ 1966—May
- ☐ —June

IMPORTANT: Be sure to give 2nd and 3rd choice as certain issues are in very short supply. Magazines are all complete, in good condition. If you don't want to clip magazines, place order in letter and print or type legibly.

RAILROAD MODEL CRAFTSMAN,
Dept. 6066, P.O. Drawer C
Ramsey, N.J. 07446

Enclosed find $..... Please send me the back issues of RAILROAD CRAFTSMAN which I have checked above, at the price of any 10 for $3.50. Single copy price 50 cents each.

NAME .....

STREET .....

CITY .....STATE.....ZIP.....

PLEASE PRINT OR TYPE CLEARLY.
Copies postpaid in U.S.A. and Canada.

Please add 50c for each 10 copies sent to Foreign countries.

RMC CLASSIFIED ADVERTISING SECTION

COMMERCIAL CLASSIFIED ADVERTISING: rate 20c per word. Count all initials as words. Zone or zip number free. Fourth insertion of same ad free. Ads payable in advance. We must have home or business addresses for all ads using P.O. box numbers, for our files. Ads must be at Ramsey not later than 5th of month, two months preceding date of issue. SEND ALL ADS TO: Classified Ad Dept., RAILROAD MODEL CRAFTSMAN, 6 East Main Street, Ramsey, New Jersey 07446. Ads sent to other departments may be delayed or lost. CLASSIFICATIONS: Model Railroad, Railroadiana, Custom Building Services, For Sale, Wanted, Help Wanted, Positions Wanted, Toy Train Collectors, Miscellaneous. All ads are accepted subject to the approval of the publisher.

MODEL RAILROAD

UNUSUAL ITEMS. Lionel 027-0-072. New—Used—Trade-ins—Sales—Service—Parts. Gar-Graves Track, Switches. Catalog 25c. Riedel's, P.O. Box 4244, Euclid, Ohio 44132. TF

"TROLLEY TALK." Periodical for all fans and modelers, five issue subscription $1.25. 59 Euclid Ave., Cincinnati, Ohio 45215. 8-66

CANADIANS MAIL ORDER SERVICE. Send 35c for illustrated 40 page catalogue. Harbern Model Supplies, 661 Simpson Ave., Winnipeg 15, Man., Canada. 10-66

¼" FINE SCALE—Standard, Narow Gauge—Trucks, Plans, Kits. Detail Parts List 10c. Coronado Scale Models, 1544 E. Cypress, Phoenix, Arizona 85006. 10-66

LIONEL TRAINS. Complete supply, many discontinued items. Bargain list 10c. Lionel Catalog 35c SAE your list. Pelican Model Shop, 2815 Main St., Baton Rouge, La. 10-66

ZANE—LARGE VARIETY of "O" Gauge ¼" Scale Model Railroad Supplies & Equipment. 201 Linderman Ave., Cherry Hill, N.J. 08034 TF

HO SCRATCH BUILDING SUPPLIES, locos, car kits, buildings, landscape materials. Custom precision machined loco frames, sketch for quote. Free list, mail order only. R & S Hobby Supply, P.O. Box 2243, Van Nuys, Calif. 91404.

SOMETHING SPECIAL?? Your own HO Business car, $3.85; Pullmans, $3.25; 25c handling. Kevin White, 36 Hawthorne, Williston Park, N.Y. 11596.

IF YOU HAVE A WATER TOWER you should have our Pump House. HO. Pre-cut 1/16th plywood—only $1.75 Plus 7 Frontier bldgs. Also available 30' Truss Rod Car kits in "O" gauge. Send S.A.E. for illustrated brochure. Lazy Axe Models, P.O. Box 3142, Granada Hills, Calif. 91344.

PROMPT SERVICE. Wood, Scale Lumber, Screws, Paint, Track, Scenery, Tools, Couplers, Trucks, Kits, Engines and Custom Work. Tyco engine parts and service. Catalog 25c refundable. Al Strete Box 2874C, Columbus, Ohio 43204. 11-66

FREE LIST HO SCALE LOCOS & SUPPLIES. New, used and sale items. Hobbies For Men, P.O. Box 149, Beacon, N.Y. 12508. 11/66

Sn3 D&RGW BOXCAR KIT—Tomalco Castings, Grandt Door & End Details, NE wood, VCW transfer. Lettering, Pruitt Plans. $9.50 less Trucks & Couplers. TOMALCO TT plus all Kemtron TT & S items. TOMALCO, Box 158, McCracken, Kansas 67556.

MODEL RAILROAD

CLINCHFIELD-ANN ARBOR 1910 BOXCARS, Canadian Railway Models' double kit $5.95. Ambroid's B&O cushion coil car $5.25. Postpaid. Complete catalog 20c (refundable). Howard Geffen, 1935 Shore Parkway, Brooklyn, N.Y. 11214.

HO ENGINES: Buy now—from Athearn's latest lineup of new diesels at special low prices. SD-45 $11.50, SDP-40 $11.50, SW-1500 Cow & Calf combo $11.50, GP-35 $9.50. Super DD-40, single motor $15.50, twin motor $19.50. And AHM's newest—NYC J3a Hudson 4-6-4 $22.50, PRR J-1 2-10-4 $67.50. Let us reserve your UP Big Boy at only $37.50. Postage USA just 25c. Look to . . . CROWN POINT MODELERS, Box 66, Essexville, Mich. 48732.

RED BALL shipping mail orders NOW. Price lists, dime. Box 301MC, Dunellen, N.J. 08812. 6-66

BUILD PASSENGER CARRYING, lawnmower engine powered trackless "1880" train. Construction packet: drawings, photographs, instructions only $4.50 postpaid. Illustrated literature $1.00 refundable. Dudley's Trains, 901 Cole, Huntsville, Alabama 35802. 11-66

RAILROADIANA

RAILROAD PRINTING! All your needs. New Catalog, sample; 25c, refundable. Salamanca Press, Salamanca, N.Y. 14779. 11-66

SLIDES & PHOTOS. Lists and sample, 35c. Specify roads. Also slides made from your negatives, photos, color cards. SAE for particulars. 35-Slides Co., Box 6666, Green Mt. Falls, Colo. 1-67

SIXTY DIFFERENT RAILROAD SOUND RECORDS. One source, exclusive catalog free. Railfan Records, 300 Chelsea, Louisville, Ky. 40207. TF

"CURVED SIDE CARS." Lightweight trolleys in fifteen states and Canada, builder's photos, drawings, 120 pages, index, $9.00. Wagner Car Co., 59 Euclid Ave., Cincinnati Ohio 45215. 8-66

NEW YORK ONTARIO & WESTERN RAILWAY 1898 employee timetable reproduction. Fascinating, lists Chicago through trains. Now abandoned, $2.00 ppd. Model Craftsman Publishing Corp., 6 East Main Street, Ramsey, N.J. 07446. tf

REEFER SIDES: Your Road Name, Etc: Sample Order, 5 Pr. - $1.00. Latest Printing Catalog. Samples, 25c. Valentine Press, 911 Coreth, New Braunfels, Texas 78130. 10-66

CUSTOM BUILDING SERVICES

SCALE O GAUGE. Locos, parts, kits, cars, etc. Machining Two Railing Conversions, Custom Building & Painting. Trade-ins accepted. Olney Miniature Train Shop, 737 Hoffnagle St., Phila., Pa. 19111. Phone: FI 2-6304. tf

CUSTOM PAINTING SUPERDETAILING. Guaranteed Work. Highest Standards. HO steam weathering specialty. Brown, 4 Sandsbury, Lutherville, Md. 21093. 10-66

FOR SALE

A MUST FOR MARX COLLECTORS. Photo copy 15 page Marx catalog, late 40's showing entire line plus data. $4.00. Smiley, 13709 Casimir, Gardena, Calif. 90249.

WANT TO BUY

BASSETT-LOWKE 2-6-0 Live Steam Mogul. Must be good mechanical condition. Will repaint. State price. Robert Barnett, 17254 Signature Dr., Granada Hills, Calif. 91344.

LIONEL LOCOS 408 or 408E in good operating condition. Will pay $75.00 for either one. Karl Smith, 1227A Glenview Ave., Wauwatusa, Wis. 53213.

TOY TRAIN COLLECTORS

WANTED—TOY TRAINS, built before 1942. Send price and description. Top prices paid. Jack Windt, 1939 Golf St., Sarasota, Fla. 33577. 2-67

OLD TRAINS, all kinds, bought, sold, repaired. Trolleys and catalogs wanted. What have you or what do you need? Will trade new Lionel HO. Frank Rochat, P.O. Box 241, Carlstadt, N.J. TF

STANDARD/WIDE GAUGE trains, trolleys, toy train catalogs, Erector/Meccano sets, Cast Iron Toys, WANTED. Alden Miller, 3212-34th Avenue South, Minneapolis, Minnesota 55406. TF

TRAIN COLLECTION FOR SALE. Flyer, Lionel, Bing, etc. Wood, cast iron, tin. Send for bid list. Paul Applegate, 23280 Leonora Dr., Woodland Hills, Calif. 91364.

WANTED OLD TOY TRAINS. Lionel, Ives, Flyer, Dorfan, Boucher, Voltamp, Bing, Marklin, others. All gauges. Nobody pays more. John Cox 1765 Sixth South, Seattle, Wash. 98134. 11-66

on our part, resulting in a phone call to Bowser's Superintendent of Motive Power and Machinery, Lew English. It seemed to us that the Bowser motor furnished should have washers at the front end to take up end play. Not so. End play is adjusted by the plastic tubing connection with the main shaft. The motor has a blind rear bearing, with a little ball inside for the shaft to bear against. The plastic tubing makes it easy to adjust the end play. Lew English noted that almost all Bowser motors returned because of burn-out have washers inserted between the armature and front bearing. Had we read the instructions, we would have learned this at the time.

As with all steam locomotives, you must watch the clearance between the crosshead mainrod screw and the front driver crankpin. If necessary the crosshead guides should be bent out a little, or one of the parts should be filed to provide a bit more clearance. Modelers might find it interesting to note that on real locomotives, this clearance was often one real inch or less. Scale that down to HO!

The weight of the assembled locomotive is over 1½ pounds, so that it should be able to pull long trains. Its length from rear bulkhead to pilot beam is 7¼ inches, plus another half inch for root overhang and 3/16 inch for pilot nose. As with the Bowser K-11 Pacific and Challenger, no tender comes with the kit. This is appropriate since the USRA Mountain used a variety of tenders.

The assembled locomotive has a top speed of about 70 mph at full throttle. The mechanism of Bowser engines operate best after some breaking in, at which time they should operate at a crawl. At $39.95, this kit is certainly a good buy.

Some suggested conversions of the Bowser Heavy USRA Mountain kit are given below. It is assumed that the reader will arm himself with necessary plans, photos (both sides of locomotive), and generally follow prototype practice in the adding of necessary detail. Some of the suggested locomotives are USRA light Mountain types or post-USRA designs. The differences are relatively slight. Driver diameter also varies, some being 70 inch and others 72 inch. This also can be overlooked since the NMRA standard flanges tends to make a driver appear larger than it actually is. Larger flanges would require blind center drivers.

Keep in mind that these engines often appeared different after major shopping, with new parts, relocated parts, and even new tenders.

Missouri Pacific. Cal-Scale TL-268 front end throttle, HL-201 Pyle headlight with visor, BE-299 angle bracket bell; Kemtron Budd 650 trailing truck (or PFM ATSF 2-10-2); Mantua long distance tender. Some locos had Baker valve gear, Kemtron Budd 555 or import.

Pennsylvania M-1, M-1a: Use Bowser mechanism only, with appropriate Bowser PRR parts such as lead and trailing truck, long tender, cylinders for M-1, plus Cal-Scale kit 2001 for PRR front end detailing, and Cary M-1 boiler (Cary cylinders for M-1a). Also Bowser (old Penn-Line) valve gear and associated parts. Full PRR model diagrams showing parts and numbers are in Bowser catalog.

Louisville & Nashville: Valve gear hanger slightly different shape. Akane or PFM USRA tender.

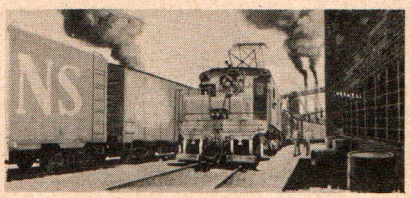
New York, Ontario & Western: Trailing truck, Kemtron Budd 650; Akane or PFM USRA tender.

Soo Line: Kemtron Budd 650 trailing truck; Cal-Scale BE-299 angle bracket bell; Cal-Scale HL-205 Pyle headlight; Akane or PFM USRA tender.

Texas & Pacific: Varney brass coal tender; Cal-Scale RA-266 or 267 air pump shield with two Cal-Scale AP-240 air pumps; Kemtron Budd 650 trailing truck. Modify running board lines.

Wabash: Mantua long haul tender with front deck cut off; Kemtron X-260 vestibule cab; Cal-Scale HL-201 Pyle headlight with visor; Cal-Scale FW-270 Worthington feedwater heater set; Pacific Fast Mail Great Northern 4-8-4 valve gear; Pacific Fast Mail or Bowser (Penn Line) T-1 Duplex valve gear.

New Haven: Cal-Scale 2003 Elesco feedwater heater system kit; Kemtron Budd 650 trailing truck; Cal-Scale 205 Pyle headlight; valve gear, Southern style removed from Akane USRA 2-10-2, or Baker, Kemtron Budd 555.; Tender, USRA by Akane or PFM. Rebuilt locomotives had Vanderbilt tenders similar to Gem C&O or LMB 2-10-2.

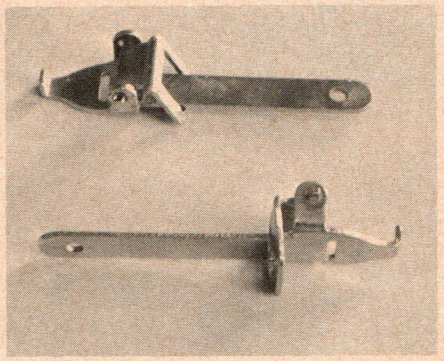


Railroad Prints

Mfd. by Midwest Traction Lines, Inc., Box 23, Marion, Ohio 43302.

Midwest has published a set of three railroad prints by Carl W. Carnes which are of special interest to traction buffs. The drawings depict a South Shore steeplecab in an industrial scene, a doubleheaded Great Northern Y-1 emerging with a freight from a tunnel, and the North Shore's Electroliner roaring over a culvert in a wooded setting.

The prints measure 11" x 21" plus white borders, printed on heavy textured stock suitable for framing. All three prints are printed by the duotone process. These prints should meet the need of electric railway fans for good traction prints. Priced at $9.00 per set of three, mailed postpaid in heavy tube.



Ives reproduction couplers for replacement purposes are made of heavy gauge nickel plated steel by Joe Weatherly, Arlington.

Ives Reproduction Couplers: Tinplate

Mfd. by Joe Weatherly, 200 Van Buren St., Falls Church, Va. 22046.

Joe Weatherly has come up with reproduction Ives couplers patterned after the larger size units used on Bridgeport production, not couplers attached in Irvington production, which would be the conventional Lionel latch type.

The couplers are of heavy steel construction, nickel plated, and measure 2-⅜ inches overall. Weatherly also offers restoration service on Ives and other makes of old toy trains. Contact maker regarding prices.

PASSENGER TRUCKS by CENTRAL VALLEY
CATALOG FOLDER 10c
"Finest HO Trucks You Can Buy"
13000 SATICOY STREET NORTH HOLLYWOOD CALIFORNIA

LEES HOBBY SUPPLIES INC
PEN OILER
125
9½" overall reach
NEW
Finger tip control of oil drops, dispenses a drop or a fraction of a drop, extends to 9½" overall reach, .035 stainless steel tube, oil flows through "needle-thin" tube applicator, retracts into container, permanently attached tube sealing cap. Lees is proud to supply you with this handy instrument.

4 GREAT NEW LEES CATALOGS
R/C PLANES & BOATS—over 100 pgs. 75¢
RAILROADS—more than 100 pgs. $1.00
SLOT CARS—over 34 pgs. 25¢
MINIATURE FIGURES—73 pgs. of items 50¢
ORDER ONE, OR ALL FOR $2 & SAVE!
Cost of catalog is fully refunded with your first merchandise order for $5.00 or more.

Send mail order and all correspondence to:
Lees Hobby Industries Inc.
2094B Fifth St., E. Meadow, N.Y. 11554

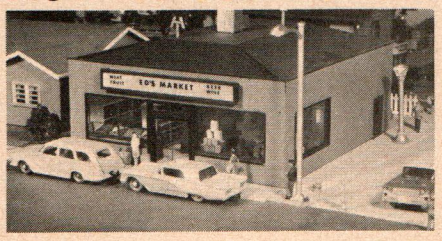
VISIT ONE OF OUR 3 GREAT STORES OR MAIL ORDER NOW!

Nassau County, L.I.
Complete Hobby Shop
2072 Front St.
E. Meadow, L.I.

Speedway & Slot Cars
2686 Hempstead Tpke.
Levittown, L.I.
next to Howard Johnson

Suffolk County, L.I., N.Y.
Complete Hobby Shop
3018 Jericho Turnpike,
Elwood W. of Commack

Finally!
New--NEIGHBORHOOD MARKET in HO

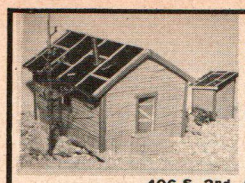


A typically styled neighborhood market —or for Main Street in a small town. The kit features die-cut heavy matboard walls in pastel green, with **extra sidewalls** to permit either left hand or right hand construction. It may be used in any position at a street intersection, or midblock between other stores.

BY DAY . . . . . or . . . . . BY NIGHT

Also included are: Parts for illuminated market sign, shelving and other store fixtures, meat counter, vegetable stand, window displays, the "stock", **BULBS for lighting**, and even the "fruit and vegetables". (Figures not included.)
"All you need is in one box."

Kit #76 NEIGHBORHOOD MARKET with Interior & Lighting .. Only $5.95
24 pg. Structure & Bldg. Materials Catalog. Illustrated, plus modeling information.....50c
1965-66 28 pg. Interurban Modeling Catalog. 24 Prototype & Overhead Wire Information....50c
E. SUYDAM & COMPANY
BOX 55 · DUARTE · CALIF. 91010



This is only one of hundreds of new imitation wood structure kits. Easy to assemble, no painting & very little gluing. Inquire at your dealers or send 10c for catalog.

EDWARD BLACK
406 S. 2nd, Alhambra, Calif. 91802

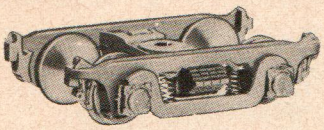
SATISFIED . . .
WITH YOUR PRESENT GAUGE?
START MAN-SIZE RAILROADING IN THE MIDDLE-SIZE GAUGE
Send for free brochure
SEE WHAT IS AVAILABLE
S GAUGE HERALD, BOX 105C
ORADELL, NEW JERSEY

RAIL—3 FOOT LENGTHS

HO Gauge .100 high, 99 feet, Brass	$3.75
HO Gauge .100 high, 99 feet. Nickel Silver	5.95
S Gauge .125 high, 99 feet, steel	4.50
S Gauge .125 high, 99 feet. Nickel Silver	10.00
O Gauge .172 high, 99 feet. Brass	10.95
O Gauge .172 high, 99 feet. Steel	7.95
O Gauge .172 high, 99 feet. Nickel Silver	18.00

Postpaid in U. S. Dealer Inquiries Invited
MODEL RAILROAD PRODUCTS
1379 Mineral Springs Ave., N. Providence, R. I.

NEW! HO Micro-Motive RP-25 Low-Profile Freight & Passenger Car Trucks and Wheel Sets

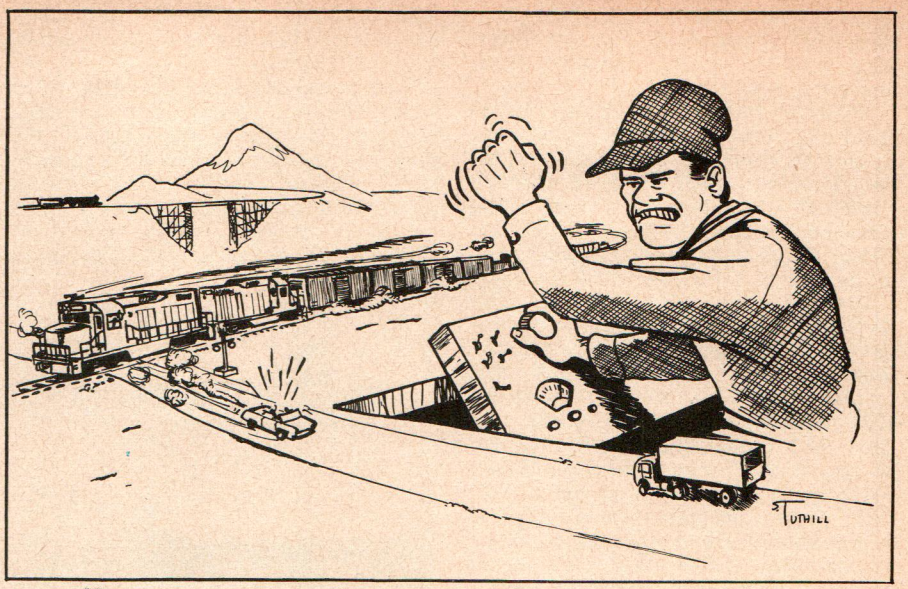


201 Roller Bearing 4-Whl. Passenger	Pr. 1.69
202 Exp. Reefer as above but 33" Whls.	Pr. 1.69
101 Bettendorf 50 Ton Frt.	Pr. .95
103 Archbar Freight	Pr. .95
106 Symington Hi-Speed Roller Brg. Frt.	Pr. .95
TM-105 Andrews Heavy Duty Frt.	Pr. .95
133 Replacement 33" Wheels, Set of 4	Pr. .49
126 Replacement 26" HOn3 Wheels, Set of 4	Pr. .69
136 Replacement 36" Pass. whls. Set of 4	Pr. .69

Our new RP-25 Low Contour trucks and wheel sets provide up to 50% increased power for locos and far less dirt build up on flanges. Less friction, bind, and dirt means better operation.

Replacement wheel sets use Torrington axles and will fit most popular trucks without alteration. **All New Cliff Line Trucks and Wheelsets now covered by NMRA Warrant No. 53! Upgrade all your HO equipment. Switch to Cliff Line.**

THE CLIFF LINE SCALE MODELS
Box 322, Station 1
North Hollywood,
Calif. 91605



TROUBLE SHOOTING

Conducted by Bill Schopp & RMC Staff

Questions for Trouble Shooting are welcome on any model railroad subject. Questions should be brief and to the point. We cannot undertake individual layout design work, nor can we recommend brands of merchandise. We will print those questions deemed of greatest interest to our readers. We will attempt to answer questions by mail when return post cards are included but cannot guarantee to answer all questions: Trouble Shooting, c/o RAILROAD MODEL CRAFTSMAN, 6 East Main St., Ramsey, N. J.

Chemical Inhalation

A. L.: Some jerky kids in our school got caught sniffing glue, with the result that the local candy store does not sell model cement any more. Why should us model builders be punished for the actions of a bunch of kooks? And what are we to do now? You can't build models without cement.

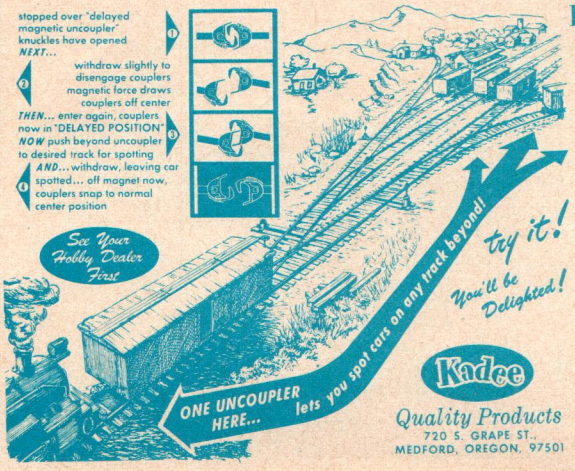
ANSWER: Most local hobby shops have ample supplies of model cement, although in some areas they are limiting sales, especially to younger buyers. If you run into trouble, your parents might have to buy the model cement you need for you.

Incidently, in normal use, model cements are not at all injurious and have brought fun and knowledge to millions of model builders for many decades.

At the same time, the Hobby Industry Association of America, Inc., is conducting a campaign warning all persons that the inhalation of any chemicals containing solvents can be dangerous to your health. Some states have passed legislation making such chemical inhalation an offense punishable by law.

Large Scale Indoor Trains

L.R.: Does anyone manufacture kits



Here is what "DELAYED" Magne-Matic uncoupling can do for you!

No longer is it necessary to uncouple only over a ramp, with KADEE'S "MKD" DELAYED ACTION Couplers it is possible after uncoupling and delay setting to push the rar to any point beyond and free of the uncoupler. This permits you the freedom of placing cars in prototype manner at any point of your choosing. When you try 'delayed' uncoupling you'll discover your railroad is not only a place to run trains, but instead it becomes a fascinating game of a miniature enactment of all the drama and excitement of a real railroad. No other coupler gives you the operational refinements for your railroad enjoyment as well as a system of accessory items, so designed to assist you in getting every bit of fine coupler performance so carefully made into them. The illustrations and explanations at the left tell exactly how the famous 'DELAYED MAGNE-MATIC COUPLERS' operate. KADEE COUPLERS are made to increase your share of railroad fun. You can probably do without the pleasures which come from having them, but why should you, your buddies aren't. Give them a try.

MK & MKD-4 couplers	2 pr. $1.20	MKD-7 couplers	2 pr. $1.30
MKD-5 & 10 couplers	2 pr. 1.20	MKD-8 couplers	2 pr. 1.30
MKD-6 couplers	2 pr. 1.30	MKD-9 couplers	2 pr. 1.30
B-12 Per Mag Uncoupler non-delayed for "MK" couplers			2 for 1.50
B-21 Per Mag Uncoupler delayed for "MKD" couplers			2 for 1.50
308 Per Mag Uncoupler delayed for "MKD" couplers, mounted under the tie, ea.			1.35
UEM-4 Electro-Magnetic Uncoupler			each 2.25
B-5 Coupler Height Gauge			each 2.00
MKD-13 Coupler Test Kit			each 3.00
#734 Track Glueing Jig			each 1.25

and parts for scale model trains larger than O gauge, electrically operated?
ANSWER: Prime source at this time is Model Engineering Works, Box 261, Monrovia, Calif. MEW, also an HO supplier, offers 7/16" wood kits for flat cars and gondolas, which include metal hardware, trucks, and working knuckle couplers. A Colorado Midland 4-6-0 has also been offered in an all brass model. These cars and locos operate on 2⅛" gauge track, the same width as the one time Standard Gauge of tinplate days, but having scale wheels and flanges.

Taller Model Mountains

J. L.: How can I add to the illusion of height on my model mountains. They should be snow capped peaks but they look more like mole hills.
ANSWER: Since most model railroads start their table or grid work at about 40 inches from the floor, the modeler can rarely make his mountains more than 24-36 inches in height, unless he shifts his Ground Zero to a lower level. Scenery can be extended below Ground Zero, right on down to the floor, even if the tracks don't extend below the standard 40 inch level. Its a scenic trick that can be very effective.

Long Cars and Sharp Curves

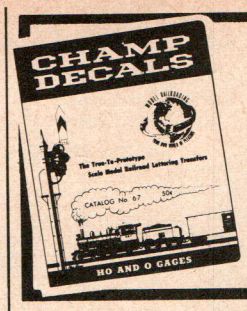
L. K.: I've recently acquired a train load of full length 80 ft. passenger cars which have truck mounted couplers. My layout is HO and of necessity must have sharp 18 inch radius curves. If I remove the present couplers and replace them with conventional draft gear mounted prototypically on the car body, will the cars be able to take the sharp curves I have?
ANSWER: No, although if you're converting couplers, you can probably mount Kadees and most other brands on the coupler bar extending from the truck. 80 ft. cars are far too long for use on 18 inch curves when equipped with conventional floor mounted couplers. As a general rule, 80 ft. cars look best on radii of at least 28 inches, and preferably 36 inches. They operate best on wider curves, too. Modelers who must compromise because of space limitations must also compromise with scale insofar as coupler mounting is concerned. The real roads would never operate 80 foot cars on curves as sharp as used by modelers.

Long Island Rail Road Steam Power

F. R.: List some of the available steam locomotives suitable for use on a model of the Long Island Rail Road.
ANSWER: First choice would be the Dickson 2-8-0 Camelback offered a few years back by several importers, including International Models Inc. (now out of business). Also try the Pennsylvania G-5s 4-6-0, Pennsy H-9 or H-10 2-8-0 and Pennsy B-6 0-6-0, all of which may properly be lettered for the Long Island. The LIRR also used Pennsy K-4s Pacifics in service regularly but these were always lettered for the parent road. Suppliers of the PRR locos would include Bowser for domestic kits and several importers for HO. Several of these locos have also been offered in 0 scale within the past few years either as domestic kits or RTR imports.

Depot Plans

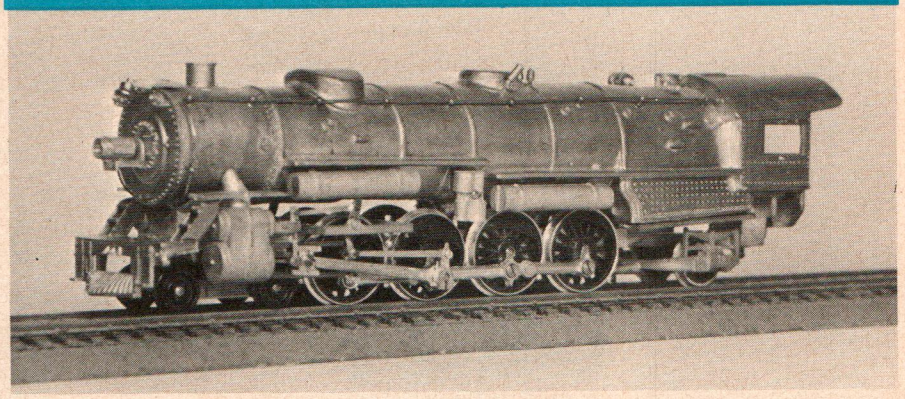
W. H.: Where can I find plans for certain railroad stations?
ANSWER: Many railroad depots have been featured in Railroad Model Craftsman through the years, either



NEW !!
8½x11 HO-O GAUGE
CATALOG #67
At Your Dealer, or 50¢ postpaid
CHAMPION DECAL CO.
P. O. Box 1178
Minot, North Dakota

PLEASE MENTION RAILROAD MODEL CRAFTSMAN whenever writing advertisers—and help make RMC an even better magazine.

Bowser USRA Heavy Mountain Kit, less tender **$39.95**



This kit includes heavy die cast lead boiler drilled and tapped; handrail stanchions; handrail wire; air reservoirs; air compressor; power reverse; pilot; pilot steps, headlight with bracket and jewel; operating bell and bracket; lost wax smoke box front, generator, whistle, pop valves and marker lights with jewels. It is powered by a Bowser "Super" motor with pillow block drive and Gramix bearings; 31-1 gear ratio; choice of spoke or scullen drivers with full circle Gramix bearings for the new diecast zamac underframe and features knuckle side rods and main rods with heavy cast detail; alligator type crossheads; operating valve gear; weighted USRA type trailing truck and spring-loaded brass pony truck with Bowser snap-in axle feature and RP 25 Delrin wheels.

Mechanism kit for scratch builders **$26.95**

(Includes main rods, side rods, crossheads, valve gear, frame drivers, cylinders, motor, lead truck and choice of USRA or Delta trailing trucks, but NO pilot.)

This loco looks good with Bowser tenders listed below. Choose the one that suits you best.

SP-1 Semi-Vanderbilt oil tender with 6 wheel Buckeye trucks **$8.50**

P-630 High Side coal tender with 4 wheel sprung trucks **$6.95**

P-640 High Side coal tender with doghouse and 4 wheel sprung trucks **$7.50**

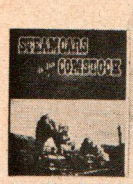
P-650 Long Haul coal tender with 6 wheel Buckeye trucks, marker lights with jewels and doghouse **$8.75**

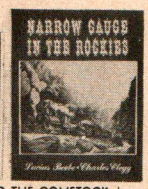
All above tenders have RP-25 wheels and highly detailed diecast construction, making them heavy enough for good electrical contact.

Bowser MFG. CO., *Facing the parking lot of the Montour Shopping Plaza — Visitors Welcome*
21 HOWARD ST., MONTOURSVILLE, PA. 17754

GREAT BOOKS for model rails

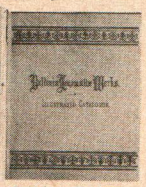
A TRAINLOAD OF GREAT





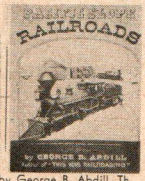
505—STEAMCARS TO THE COMSTOCK, by Beebe & Clegg. The Virginia & Truckee and the Carson & Colorado in picture and prose. A collection of rare old pictures and three oil paintings by Howard Fogg. 8x11, 100 pages, maps, over 120 illustrations. **$4.50**

502—NARROW GAUGE IN THE ROCKIES, by Lucius Beebe and Charles Clegg. A large volume on slim pikes of Colorado, Utah, and New Mexico: D&RG, Mears short lines, DSP&P, F&CC, Uintah, and RGS. 224 pages, 250 illustrations, 8x11. Second printing. **$8.50**



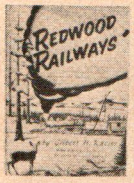
501—O&W, by William F. Helmer. The birth, the life, and the death of the railfan's railroad. 228 pages 6x9 with 150 photos, maps, timetables, and a complete motive power roster. Camelbacks, diesels, trestles; all beautifully depicted. "A must in every railfan's library" says Hal Carstens of RMC. Dust jacket and frontispiece by Otto Kuhler. **$5.00**

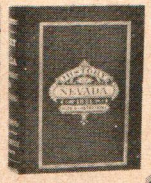
612 — BALDWIN LOCOMOTIVE WORKS, 1881 Catalog Reproduction. A rich looking volume handsomely bound in brown with gold leaf lettering. Covers many of the locos produced by Baldwin with photos and data. Letters and comments on early BLW locos. 8x11, 153 pgs. A collector's type book. **$10.00**



736—RAILS WEST, by George B. Abdill. Th final volume in the Abdill rail trilogy. Chapter cover the Middle Border, Northern Plains South-Southwest, Rocky Mountains, and Pacific Coast. This book is loaded with page after page of rare steam loco photos, for those who love them **$12.50**

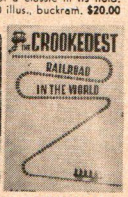
731 — PACIFIC SLOPES RAILROADS, by George B. Abdill. To the clank of link and pin, the pages carry the reader from Canada to Mexico alongside engineer Abdill in the old wooden cabs as little old trains buck and bowl over the plains, crawl up timbered slopes, and in and around treacherous mountain passes. Here are two dozen journeys into yesterday over the rails that built the West. 8½x 11, 182 pages **$10.00**





506—REDWOOD RAILWAYS, by Gilbert H. Kneiss. The story of the little roads which grew up into the Northwestern Pacific RR. 40 full pages of illustrations, 16 area maps, 2 pocket maps of entire system. Over 200 pages, 6x9. ..... **$4.75**

510—HISTORY OF NEVADA, Thompson & West. 1881. A reprint of a classic in its field. 1000 pages, 7x10½, 280 illus., buckram. **$20.00**

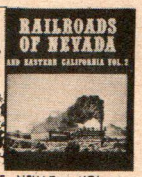


508—LITTLE RAILWAYS OF THE WORLD, Shaw. The story of the small gauge railroads; Romney, Talyllyn, and others. Unusual yet railroady. 270 pgs., 225 illus., 6½x9½, hard cover **$6.00**

514—THE CROOKEDEST RAILROAD IN THE WORLD, Wurm and Graves. History of the Mt. Tamalpais & Muir Woods Ry. in photos and text: Shays, Heislers, plans. Hard cover **$3.75**

656—PRR LOCO DIAGRAM BOOK **$4.00**
657—B&O LOCO DIAGRAM BOOK **$4.00**
655—ERIE RR LOCO DIAGRAM BOOK **$4.00**

162—LAST OF Th 3 FT. LOGGERS, Kreig. Story of the West Side Lumber and Hetchy Hetchy & Yosemite Valley lines. 96 pgs., 190 illus., 8½ x 11, hardboard **$6.95**



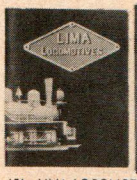
521—RAILROADS OF NEVADA, VOL. 1, Myrick. 50 railroads are covered in this first of 2 volumes of Nevada RRs. Beautifully printed, Special maps **$12.50**

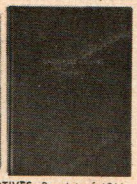
527—RAILROAD OF NEVADA, VOL. 2, Myrick. Covering the Southern Roads in a deluxe presentation. Profusely illustrated **$12.95**

THRILLING READING!

850—SPEED LIMIT 30, Downs. The story of the narrow gauge branch lines of the Australian Victorian Railways. 130 pgs., 5½ x 8½, hardboard **$6.00**

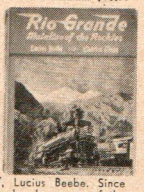
531—RAILWAYS OF AUSTRALIA, Singleton & Burke. Changes in Aussie RRs from steam to diesel. 176 illus., 3-color foldout map. 6½ x 9, 160 pgs., cloth bound **$5.00**





156—LIMA LOCOMOTIVES. Reprint of 1911 Builders catalog. Incomparable gathering of illustrations, data, descriptions of all types built by this mfr. including Shays. Colorful dust jacket. 48 pgs., 8½ x 11, paper bound. **$3.00**

524—ROGERS LOCOMOTIVE WORKS CATALOG reproduction including history, origin and growth of company from 1831 to 1886. Limited edition of 1250 copies. 200 pgs., 8 x 11, brown cloth **$10.00**



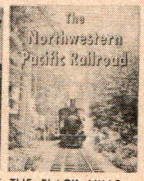
520—20TH CENTURY, Lucius Beebe. Since 1902, the 20th Century has been one of the worlds great trains. Beebbe has chronicled this luxury run from its beginnings with a mass of detail in text, pictures, clippings, and paintings. Gives the feel of real railroading at the height of the era of opulence. 180 pgs., 8½ x 11, hardbound **$5.95**

518—RIO GRANDE, Beebe & Clegg. The Mainline to the Rockies. The splendor of the Rockies combined with the tale of the Rio Grande. 380 pgs., over 540 illus., 4-color reproduction, maps, drawings. Cloth binding **$10.00**

164—KANSAS WEST, Anderson. The Kansas Pacific and the D&RG. Scholarly work with 90 illus., 2 Kuhler paintings, 264 pgs., 6 x 9 hard bound **$6.95**

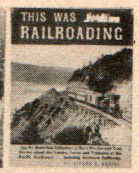
423—THIS WAS RAILROADING, by George B. Abdill. You'll thumb through this fascinating volume many times to study the more than 350 rare old photos before you'll even start on the text. Hard to say which are more intriguing: the old locomotives or the breathtaking scenes of bygone railroading. Plenty of trestles, wrecks, equipment and ROW scenes. This book is pure railroading with all of the cinders and soot. A must. 8½x11, 192 pages. **$3.95**

741—LOCO ENGINEERS ALBUM. Abdill. 5th in a series. 300 pix. 8½x10½ 192p **$12.95**
534—THE TRAINS WE RODE, Beebe & Gleeg. 4770 pgs., 801 illustrations, 8½ x 11 cloth **$15.00**



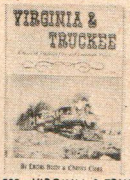
740—RAILROADS OF THE BLACK HILLS, Fielder. 200 photos of the South Dakota railroads. Includes 18 pages of Jackson photos. Letterpress printed on coated stock. 8½ x 11, hardboard **$12.50**

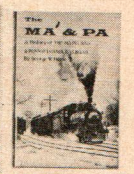
173—NORTHWESTERN PACIFIC, Stindt & Dunscomb. Story of the NWP, wholly owned subsidiary of the SP. Loaded with ferry boats, nostalgia, smoke, creaking coaches. 272 pgs. 400 illus., 8½ x 11, hardboard **$12.50**



155—ARTICULATED LOCOS OF THE WESTERN PACIFIC, Noble. Unforgettable action and still photos of the WP's giant steamers. Rosters of all WP steam power. 24 pgs., 26 illus., 8½ x 11, paper **$1.50**

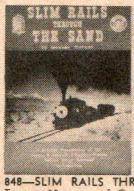
847—REDWOODS, IRON HORSES & THE PACIFIC, Crump. Story of the California Western and its Skunk rail cars. 150 illustrations, maps, drawings, photos, plus text. 160 pgs., hardbound **$6.95**





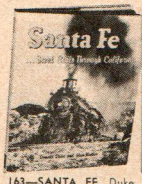
522—VIRGINIA & TRUCKEE, Beebe & Clegg. Fifth edition. A story of Virginia City and Comstock Times. Soft cover, 68 pgs., 6x9. **$1.00**

523—THE MA & PA, George Hilton. History of the Maryland & Pennsylvania from its start. Profusely illustrated. 183 pgs., 6x9, hard cover **$5.00**



848—SLIM RAILS THROUGH THE SAND Turner. 80 years of Carson & Colorado a SP narrow gauge. Many rare plans. 112 pgs. 8½ x 11, hard bound **$6.95**

532—THE RUTLAND ROAD, Shaughnessy. Jim Shaughnessy has come up with a superb volume on Vermont's big little railroad. Over 370 pages pack in 425 photos, 16 maps, timetables, charts, plus readable text. 9 x 11, hard bound **$10.00**

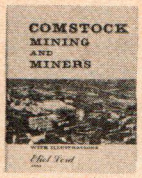


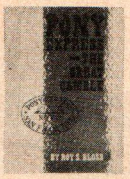
163—SANTA FE, Duke & Kistler. Over 300 illus., maps, paintings, photos and text of a great carrier. A must for all Santa Fe buffs. 184 pgs., 8½ x 11. Hard bound **$10.00**

822—STEAM LOCOS OF THE BURLINGTON ROUTE, Corbin & Kurka. A labor of love on one of our great railroads. Loaded with data and photos. 9 x 11½. 302 pgs., coated stock. **$15.00**

172—PACIFIC COAST SHAY, Dan Ranger. From the beginnings of the Shay to development of famed Pacific Coast type. Many illus., 8½ x 11, 112 pgs., hardbd. **$7.95**

517—MIXED TRAIN DAILY, Lucius Beebe Greatest book on mixed trains and short lines ever written. Full of photos and sparkling text. 370 pgs., 8 x 11 ..... **$9.50**





509—COMSTOCK MINING AND MINERS, by Eliot Lord. A reproduction of the famous 1883 edition with addition of 117 illustrations. An on-the-spot account of bonanza days in Virginia City, Nevada. Not a railroad book but essential to all railfans interested in Western Lore. 578 pages. **$8.50**

511—PONY EXPRESS—THE GREAT GAMBLE, by Roy Bloss. Before the railroad came the Pony Express. Of special interest to philatelists, historians, and railfans, and transportation enthusiasts. 200 pages text, 40 pages illustrations. 6x9. ..... **$4.50**

176—RAILS TO THE RISING SUN. Small. About smoky little trains in Japan. 8½x11 ..... **$7.95**

733—REDWOOD CLASSIC, by Ralph Andrews. 100 years of California logging, railroads, San Francisco, and men. Rare logging railroad scenes. **$10.00**

812 — WEEKS MILLS Y OF THE TWO FOOTER, Thurlow. History and pix of the Wiscasset, Waterville & Farmington, and Kennebec Central. 5½x8 64p. paperback **$1.75**

813—WW&F TWO FOOTER, HAIL & FAREWELL, Thurlow. More Wiscasset, Waterville & Farmington history and pix. 8½x5½ paperback **$1.95**

814—OVER THE RAILS BY STEAM, Thurlow. A railroad scrapbook of Maine narrow gauge lines. 104p., 5½x8½ paperback **$1.95**

806 — POCKET ENCYCLOPEDIA BRITISH STEAM LOCOS, Nock. 192 British steam locos in color. 192p., 5x7 hardbd **$2.90**

807—NORTH EASTERN ATLANTICS, Hoole. Comprehensive coverage of British 4-4-2 types on the NE. 6x9, 64p., paperback **$2.75**

528—COVERED BRIDGES OF THE WEST. 201 choice photos covering Oregon, Calif., Wash. 150 pgs., 8½ x 11, hard cover **$5.95**

851—RAILROADING IN THE NORTHWEST PINES, Gutohrlein. Story of the Rayonier Inc. railroad, photos and text. 5½ x 8. 36 pgs., paper **$1.00**

852—PENNSYLVANIA RR, THE EARLY DAYS, Brooks. Small volume on the Pennsy's beginnings. Many early dwgs. 5½ x 8. 52 pgs., paper **$1.25**

808—GONE WITH REGRET, Behrend. Recollections of Great Western Ry., 1922-1947. British. A delight. 6x9, 190p., hardbd **$3.90**

809—CASTLES & KINGS. Pictorial survey of Great Western steam locos. Many great action photos. British. 7½x10, 96p., hardbound **$5.40**

811 — COLORADO'S MOUNTAIN RAILROADS Vol. 2. The D&RGW, RGW, RGS. 206 photos, 206 pages ,6x9 paperback **$5.95**

658—C&O POWER, Staufer. 352 p, over 700 photos, text, on steam and diesel power 1900-1965. 8½x11 hardbd **$15.00**

815—PICTORIAL HISTORY C&NW, Knudsen. Over 300 rare pix of steampower on the C&NW, 1848-1956. Maps, diagrams. 208 p., 8½x11 hardbd **$10.00**

856—DINNER IN THE DINER, Hollister. Great railroad recipes. Let the wife feed the Friday night gang the right way. Superb rare recipes to delight the gourmet. 8½x11 hardbd **$5.95**

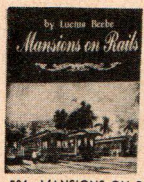
827—COLORADO MOUNTAIN RAILROAD, VOL. 1. Covers 37 roads from Argentine Central thru DNW&P. 110 pgs., 130 pix, etc. 6 x 9, paper **$3.00**

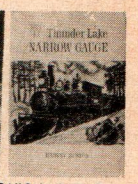
737—LOGGING RAILROADS OF THE WEST, Adams. Remarkable assemblage of logging road photos, text, along with a complete list of western logging rrs **$12.50**

175—THE GENERAL. Pittenger. Reproduction of the original account of 1862. 416 p 6x9 ..... **$6.95**

834—BUFFALO, LOCKPORT & ROCHESTER RY., Gordon. 8½ x 11, 84 pgs., 100 pix, maps, tts., etc. Paper-covered volume on electric ryr out of Rochester 54 miles to Lockport **$2.50**

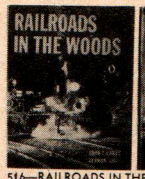
751—LOCOS OF THE PENNSYLVANIA RR, Warner. Largely reprinted material from rare old issues of the Baldwin Loco Works magazine. Covers up thru mid-1920 period. 80 pgs., 8½x11, paper, ... **$3.00**

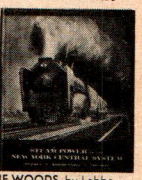




504—MANSIONS ON RAILS, by Lucius Beebe. The story of private railroad cars and the moguls who rode them amid plush Victorian appointments. 380 pages; 350 rare pictures, 6 in full color. **$10.00**

823—THUNDER LAKE NARROW GAUGE, by Huston. Wisconsin's last narrow gauge operation, the Robbins Railroad, in pictures and text, served Wisconsin from 1893 thru 1941 on 3 ft. gauge tracks. 6¼ x 9¼. 145 pgs. **$7.50**

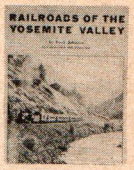




516—RAILROADS IN THE WOODS, by Labbe and Goe. 269 pps. and 440 illustrations depict the thrilling story of logging railroads. 8¾ x 11¼. Loaded with Shays, Heislers, equipment. Best logging book yet. **$10.00**

651—STEAM POWER OF THE NEW YORK CENTRAL, by Stoufer. Vol. 1. Covers the period 1915-1955 and is jammed with Hudsons, Mohawks, Niagaras, Pacifics, and smaller types. A 224 page picture book of photos, plans, calendars, and prints. A must for every NYC fan. 8½ x 11. ..... **$12.00**

424—EARLY AMERICAN STEAM LOCOMOTIVES, Reed Kinert. Steam power from 1830 to 1900. 96 illustrations, 16 in color. 160 pgs., 11 x 8½, coated paper, hardbd. **$4.95**



171—RAILROAD AVENUE, Freeman Hubbard. Varied collection of great railroad tales and legends, illus., 6 x 9. hardbound, New edition. **$5.95**

846—RAILROAD OF YOSEMITE VALLEY, Johnston. Covers Yosemite Valley RR, Yosemite Lumber Co., Yosemite Sugar Pine Lumber Co., and Yosemite Portland Cement Corp. 400 illus., 208 pgs., hardbound **$12.50**

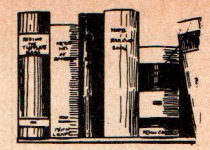
526—OVERLAND LIMITED, Beebe. Let his critics scoff, this is Beebe at his Victorian pompous best, covering one of America's great trains, as only a gourmet and artist can. Plenty of vintage equipment photos.

503—THE MAINE TWO FOOTERS, by Linwood Moody. First complete coverage of all the New England 2-Footers: Wiscasset, Waterville & Farmington; Monson; Edaville; Kennebec Central; Billerica & Bedford; Bridgeton & Saco River; Bridgeton & Harrison; Sandy River & Rangeley system; Wiscasset & Quebec; and others. 6x9, 328 pages, almost 200 illustrations, 60,000 word text, maps. **$6.00**

the lure, the fascination of railroading in these fine books for model rails.

For more advanced reading on specialized model railroad subjects, these books by experts in the field are a must. Start adding to your own railroad library today.

RAILROAD BOOKS FOR YOUR LIBRARY

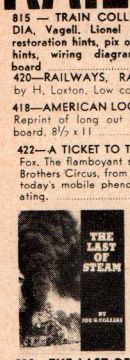


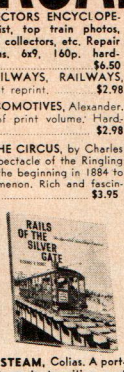
815 — TRAIN COLLECTORS ENCYCLOPEDIA, Vagell. Lionel list, top train photos, restoration hints, pix of collectors, etc. Repair hints, wiring diagrams. 6x9, 160p. hardboard $6.50

420—RAILWAYS, RAILWAYS, RAILWAYS, by H. Loxton. Low cost reprint. $2.98

418—AMERICAN LOCOMOTIVES, Alexander. Reprint of long out of print volume. Hardboard. 8½ x 11 ..... $2.98

422—A TICKET TO THE CIRCUS, by Charles Fox. The flamboyant spectacle of the Ringling Brothers Circus, from the beginning in 1884 to today's mobile phenomenon. Rich and fascinating. $3.95





513—THE LAST OF STEAM, Colias. A portfolio of steam and steam in transition, east and west. The last ten years of steam in the U.S. Fine action photos in the grand tradition. 8½x11, 260 pgs., 275. photos, hard cover $10.00

153—RAILS OF THE SILVER GATE, Richard V. Dodge. The John D. Spreckels rail empire in California's Southwest. Described are the horsecars, ferry boats, cablecars, electric street cars, interurbans, and the San Diego & Arizona Railroad. 144 pgs., 190 illus., 8½ x 11, hard cover $8.50

413—HIGH IRON, Lucius Beebe. Text and pix of large and short lines. Long out of print; now in new low price edition. 8¼ x 11. 224 pgs., hard cover $2.98

410—HIGHLINERS, Lucius Beebe. A railroad album of great train photos. Out of print for years. New low price edition. 8¼ x 11. over 200 pages $2.98

415—HIGHBALL, Beebe. A pageant of trains. 8¼ x 11, 200 pgs., hardbd. Reprint $2.98

417—TRAINS IN TRANSITION, Beebe. Early days of the diesel when steam was king. Reprint $2.98

Employee Timetable No. 44
June 26th, 1898

Authentic 16 page reproduction of rare 1898 NYO&W employee timetable No. 44, effective June 26th, 1898. Measures over 8 x 14". Lists Chicago Express, mile and freight trains. Ideal for framing. A must for collectors, railfans, modelers and historians.

$2.00 ppd.

653—B&O POWER, Sagle & Staufer. Superb history of B&O motive power. 750 photos, all-time roster, art. 352 8½ x 11 pages, hardbd. $15.00

170—RAILS ACROSS THE MIDLANDS, Cook. Pictorial rring in the grand manner, during the post WW2 period when steam still ruled. 8½ x 11, hard cover $8.95

151—SOUTHERN PACIFIC STEAM LOCOMOTIVES, Donald Duke. Pictorial anthology of Western Railroading. Espee steam power from woodburners to giant Cab-in-Front Articulateds and colorful Daylight engines. 2nd revised edition, many new photos. 88 pgs., 130 illus., 8½ x 11, hard cover $5.25

515—SIERRA RAILWAY, Dorothy Newell Deane: daughter of the engineer who built the Sierra RR. How the line was built, neighboring Yosemite Short Line, Empire City Railroad, and lumber roads. Many rare and valuable photos of the Sierra from its start through the diesel era. 300 pgs., 6 x 9, 350 photos $6.00

811—BALDWIN LOCO WORKS RECORD #72. Mallet Articulated Locos 1912 ..... $2.00

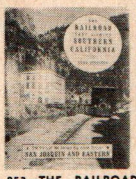
812—BALDWIN LOCO WORKS RECORD #79. Pacific Type Locos 1914 ..... $2.00

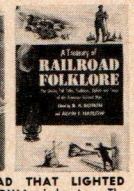
813—BALDWIN LOCO WORKS RECORD #89. Development of the 8-Wheel Loco. $2.00

810—BALDWIN LOCO WORKS RECORD #56. Steam Locos of the ATSF. 1096. Paper. $2.00

860—RAILWAY PASSENGER TRAVEL, 1825-1880. From Scribner's with old cuts, ads, view, and text. 40 pgs., 5½ x 8, soft cover $1.00

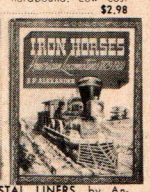
861 — LOCOMOTIVE ADVERTISING IN AMERICA, 1850-1900. Selected ads from Poor's and other journals of the period. Useful in period detailing. 40 pgs., 5½ x 8, soft cover $1.00





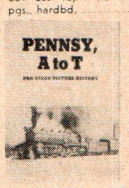
853—THE RAILROAD THAT LIGHTED SOUTHERN CALIFORNIA, Johnston. The story of the San Joaquin & Eastern RR. 128 pgs., many illus., hard cover $7.50

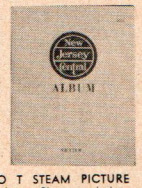
411—TREASURY OF RAILROAD FOLKLORE, Bolken & Harlow. A big book on the romance of the rails. hardbound. Low cost reprint $2.98



734—PACIFIC COASTAL LINERS, by Andrews and Larsen. 400 dramatic photos and dozens of fascinating tales recapture the glorious past of famous coastwise ships: rate wars, rivalries, races. $10.00

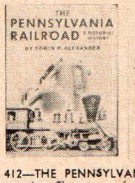
419—IRON HORSES, E. P. Alexander. Elaborate volume on steam from 1820 to 1900. Low cost reprint of 1941 book. 8½ x 11. 238 pgs., hardbd. $2.98





829—PENNSY, A TO T STEAM PICTURE HISTORY, P & D Carleton. Photos and data on PRR steam power. Paperbound $5.00

826—NEW JERSEY CENTRAL ALBUM, Crater. Picture history of the CNJ. Some text. Many rare views and equipment photos. Early rolling stock. 66 pgs., 8½ x 11, paper $3.25

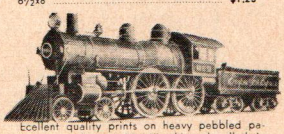


412—THE PENNSYLVANIA RAILROAD, Alexander. The story of the Pennsy from the early beginnings to 1947. New low price edition. 8½ x 11, hardbound $2.98

652—PENNSY POWER, Staufer. Steam and electric locos of the PRR from 1890 thru today. Profusely illustrated. 320 pgs., 8½ x 11. ..... $14.00

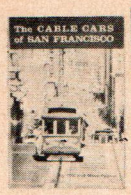
816—STEEL RAILS TO THE SUNRISE, Ziel & Foster. History of the Long Island R.R. 320 pp., 8½x11 hardbound $12.95

817—STATEN ISLAND RAPID TRANSIT, Leigh & Paul Matus. History of the Staten Island Rapid Transit. 64 pages paper. 6½x8 ..... $1.25



Ecellent quality prints on heavy pebbled paper, monochrome, 34x14" shipped rolled in tube. Drawn by Staufer.

601	NYC Hudson #5344	$1.50
602	NYC American #999	1.50
603	PENNSYLVANIA #6704 M-1a 4-8-2	1.50
604	SO. PAC. #4450 GS4 4-8-4	1.50
605	NYC #204 CUT electric	1.50
606	C&O #1177 Mikado	1.50
607	NYC #6012 Niagara	1.50
608	SOUTHERN #1393 PS4 Pacific	1.50
609	P&LE-NYC #9400 2-8-4	1.50
610	UP #3951 Challenger	1.50
611	PENNSYLVANIA class K4s	1.50
612	SP #4128 Cab-Forward	1.50



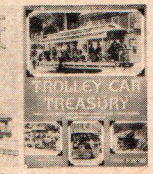
507—THE CABLE CARS OF SAN FRANCISCO by Phil and Mike Palmer. A delightful soft cover book that tells the story of these unusual and still operating cars of yesterday. Over 80 photos in 64 6x9 size pages, plus text. $1.00

805—STEAM LOCOS IN JAPAN. 55 plans. 99 pix. Book of Japanese equipment $6.50

178—RAILS THRU DIXIE. Krause & Reid. Photos and text. 176p. 325 illus., 8½x11 $8.95

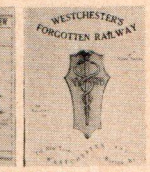
179—WESTERN TRAINS, Steinheimer & Sims. The postwar era. 72p. 85 pix. 8¼x9½ $5.95

177—AMERICAN RR JOURNAL — 1966. Yearly digest. 112p. 8½x11 hardbound $5.95



169—NORTH SHORE, Wm. Middleton. America's fastest interurban, from 1890 thru the Electroliner and final abandonment. 128 pgs., 8½ x 11, 214 illus., hard $7.95

525—CENTRAL PACIFIC & SOUTHERN PACIFIC, Lucius Beebe. Centennial story of a great transcontinental. 900 illus., 640p. 8½x11. Biggest and best of Beebe. $15.00

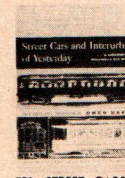


825—WHEN THE WESTCHESTER WAS NEW, Arcara. Reproductions of NYW&B articles from old early Electric Ry. Journals and Railway Age Gazette. NYW&B and Erie Stillwell coach data. Many illus., 62 pgs., 8½ x 11 paper $2.50

824—WESTCHESTER'S FORGOTTEN RAILWAY, Arcara. Text, maps. 67 pix of short lived N.Y. electric railroad. Many rare photos. 64 pgs., 8½ x 11. paper $2.50

157—PACIFIC ELECTRIC, Donald Duke. A history of the world's greatest electric interurban rail system. A full pictorial history complete with maps, text, striking wrap around cover. 64 pgs., 100 illus., 8½ x 11 ..... $3.75

840—RIDE THE BIG RED CARS, Spencer Crump. Narrative history of the Pacific Electric, packed with illustrations. 240 pgs., 8½ x 11, hard bound $10.00



752—STREET CARS & INTERURBANS OF YESTERDAY. Largely reprinted from rare old 1911 Electric Ry. Dictionary. Over 775 dwgs., pix., 175 pgs., 8½ x 11, cloth. Second printing. $10.00

754—FT. WAYNE'S TROLLEYS, Bradley. Street cars and interurbans of the Indiana Service Corp. and other lines, maps, photos, text. 7 x 10½, 176 pgs., hard bound $6.95

801—RAILWAY LOCOMOTIVES OF BRITAIN, 1960 Revised Edition, Casserly. Describes steam and diesel locos of Great Britain. Over 200 photos. Gives classes, dates, regions. 284 pgs., 3¾x5¾. Hard cover $1.25

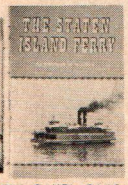
753—LOCOMOTIVES OF THE READING, Warner. Reprint from 1923 Baldwin mag. with additional Pennypacker photos. 8½x11, 32 pgs., paper. $2.00

835—HERE COMES THE TROLLEY, Gurley. Lines of Utica and Central New York. 85 illus., paper $1.25

810—COLORADO MOUNTAIN RAILROAD Vol. 3. 150p. 10 illus. $4.00

836—ERIE RR ROCHESTER DIVISION. Gordon. The Erie's electrification. Paper $3.25

Copyright © 1965 by the Model Craftsman Publishing Corporation

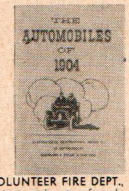


530—SHIPS & NARROW GAUGE RAILS, Best. History of the Pacific Coast Co. 215 illus., 8½ x 11, 160 pgs., cloth binding $6.00

529—STATEN ISLAND FERRY, Hilton. Complete history, operation and guide to the most famous of all ferries. 6 x 9, 64 pgs., color cover, paper $1.00

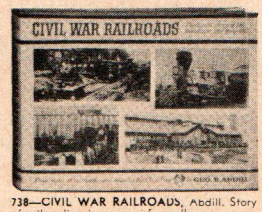
732—PACIFIC STEAMBOATS, by Newell & Williamson. Sea lore aplenty, from sidewheelers to motor ferries. Impressively pictured. $10.00

519—GREAT LAKES CAR FERRIES, George Hilton. Marine railroading on the Great Lakes, a unique blend of seafaring and railroading. Many photos, disasters, specifications, ship rosters, illus., fascinating history. Hard bound. 282 pgs., 6 x 9 ..... $6.00



863—NEW YORK'S VOLUNTEER FIRE DEPT., 1790-1866. Interesting text and cuts of early fire equip. 40 pgs., 5½ x 8½, paper $1.00

862—AUTOMOBILES OF 1904. Reprint from Frank Leslie's Popular Monthly. Data on 88 early automobiles with illustrations. 40 pgs., 5½ x 8½, paper $1.00



738—CIVIL WAR RAILROADS, Abdill. Story of railroading in an era of woodburners, guerrillas, blood, and battle. A must for period fans $12.50

533—NEVADA COUNTY NARROW GAUGE, Gerald M. Best. The California railroad that hauled gold through the forests and mountains. 8½x11. 224pp $7.50

253—MINIATURE TRACK DESIGN, Walthers. 1944 edition. Excellent for the modelar who wants to lay his own track in comformity with prototype practice. 64 pgs., paper $1.00

242—RAILFAN DIRECTORY 1964. Over 150 pages of fans firms, photos. 6 x 9 paper. $3.00

243—TRACTION FAN'S DIRECTORY—1965. 1964 Edition finally available. 180 pages of fans, photos. 6 x 9, paper $3.50

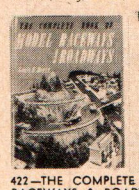
257—FREIGHT CAR DESIGN MANUAL, by Walthers, 1946. 64 page booklet describing all types of cars, lettering rules, terms, etc... $1.00

855—LOCOMOTIVE, TROLLEY AND RAIL CAR BUILDERS, ALL TIME DIRECTORY 64p. $1.50

252—SIGNALING, by W. K. Walthers. 48 page booklet on signals, switch machine wiring, etc. 75c

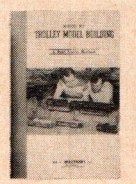
761—TROLLEY TALK, VOL. I. First 20 issue reprint of R. M. Wagner's popular trolley chit-chat paper. 100 pgs., 8½ x 11, paper $4.25

354—DADS TRAINS AND GRANDADS, TOO, Kramer. Plastic bound picture book showing nearly 90 old time trains including Carette, Marklin, Bing, Lionel, etc. $3.00



422—THE COMPLETE BOOK OF MODEL RACEWAYS & ROADWAYS, Hertz. Many aspects of model motoring are covered in this illustrated work. Some old toy trains included. Suggestions on adding HO and ¼-inch cars to train layout. 215 pgs., 7½ x 10. hardboard. $5.95

828—COMPLETE BOOK OF MODEL RAILROADING, David Sutton. Basic data on buildment. 18 chapters plus bibliography and glosing a railroad. Many mfrs. photos of equipsary. 9 x 11. 340 pgs., hard cover $15.00



251—GUIDE TO TROLLEY MODEL RAILROADING, by W. K. Walthers and R. M. Wagner. 72 page manual on overhead wire, clearances, and the many special problems facing the trolley fan. Many illustrations. Soft cover. 5½x9 ..... $1.50

203—THE HANDBOOK OF OLD AMERICAN TOYS, by Louis Hertz, is the only authoritative work on the subject of old American Toys, and is a necessity for all serious collectors, historians, and students of social history. Early tinplate railroading is covered in a clear and concise manner, giving a clear picture of the role played by toy trains from 1860 thru the 1930s. 119 plus vii pages, over 500 illustrations.

202—MESSRS IVES OF BRIDGEPORT, by Louis H. Hertz, is a must for anyone who has ever owned or seen any Ives equipment. This book gives the whole history of one of the true pioneers in the field; right up thru the Lionel acquisition of Ives. Data in this volume makes it easy to spot Ives cars as to period of manufacture. A tremendous volume that takes you back to the days of real tinplate, lithography, and brass trim. 160 plus xv pages. $8.95

654—CHESAPEAKE & OHIO DIAGRAM BOOKS. Diagrams and data of C&O steam locos. $4.00

854—NEVADA NORTHERN SAGEBRUSH SHORT LINE, Gary Allen. 48p. 5½x8 paperback $1.25

803—READING STEAM PICTORIAL, Pennypacker. The last 25 years of Reading steam power. 130p., paperbound. 8½x11. $7.00

849—WESTERN PACIFIC, Crump. The railroad that was built too late. 48p. 5½x8. $1.50

ORDER TODAY

CARSTENS PUBLICATIONS

MODEL CRAFTSMAN PUBLISHING CORP. **Dept. 5076**
P. O. Drawer C
Ramsey, New Jersey 07446

I am enclosing check or money order for $..... Please send me the books I have checked below. (If you do not care to cut magazine, print or type titles on separate sheet).

_____

_____

_____

_____

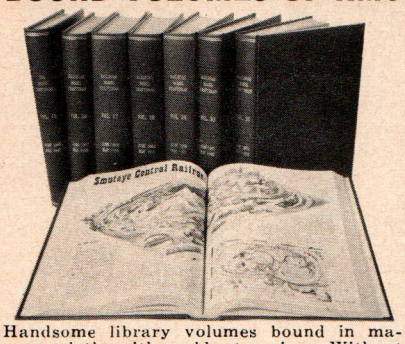
Name .....

Street .....

City ..... State ..... Zip .....

Please add 10c postage for all orders under $2.00

BOUND VOLUMES OF RMC



Handsome library volumes bound in maroon cloth with gold stamping. Without doubt the finest means of preserving model railroad data. Average over 750 pages per volume. The following now in stock; (Volume numbers run from June to May):

Vol. 32—June 1963-May 1964.....$10.00

Vol. 33—June 1964-May 1965..... 10.00

Vol. 34—June 1965-May 1966..... 10.00

Above volumes include annual index

Above prices include postage in USA and Canada. Foreign orders please add 50c per volume.

MODEL CRAFTSMAN PUBLISHING CORP.

P.O. Drawer C Ramsey, N.J. 07446

Wesley T. Marienthal, Livonia, Mich., spend 250 hours building this D&H No. 10 caboose in O gauge for the Brotherhood of Railroad Trainmen contest at the NCR convention in Toledo, winning Wes $100. Model will also be entered in NMRA Cincinnati contest.

MR. MANUFACTURER THIS COULD BE YOUR AD, SELLING YOUR PRODUCTS

as full construction articles or as plans for modeling. See also other model publications, books, and the Industrial Arts Index to periodicals. Many stations have been described, at the time of their construction, in one of the railroad or architectural journals of the period. Big city libraries are most likely to have these on file and can photocopy the pages needed.

Alternately, grab your camera, pencil, and tape measure, and track down likely candidates for modeling. A few key dimensions plus head-on photos of each wall will make accurate modeling quite easy. Perhaps some photographer buddy with an enlarger can even enlarge the negative to whatever scale in which you're working. Old depots are fast disappearing. In most cases the real roads have thrown out their old files on these buildings.

Cable Car Modeling

L. T.: How can I model a real cable car line?

ANSWER: The easy way, by using two rail pickup and having a dummy slot to simulate the actual cable. We don't know of any practical model ever having been made using a real underground cable. Crossings, switches, and other intricasies would be just too much of a headache.

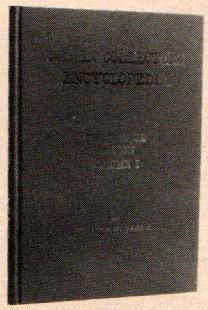
Locomotive Display

S. R.: Please suggest a method of displaying 0 gauge model locomotives at a general hobby show where there isn't enough room for a layout. Perhaps something with action.

ANSWER: How about an engine test track, such as the Pennsy had at Altoona. Big rollers are put under each driver. The locomotive's own power (motor) is turned on and the drivers can actually turn on the rollers. Equipping the test setup with ammeter and voltmeter would increase the interest.

A strip of straight track about 3 ft. long for HO, somewhat longer in O, would also make a good display. Install a small micro switch near the end of each track, to reverse current polarity, and the engine will run back and forth all day without any helping hands.

TRAIN COLLECTORS ENCYCLOPEDIA



by Bill Vagell

Bill Vagell has packed a lifetime of experience in selling and repairing toy and scale model trains into the pages of his new Train Collectors Encyclopedia. This hard covered 160 page gold stamped volume lists virtually every Lionel item ever made. More than 225 different photos and drawings depict rare old collectors' pieces, wiring diagrams and parts identifications. Included are many photos of the foremost collectors with their trains. Treasure House Bulletins 1-5 are also reprinted and included.

Train Collectors Encyclopedia by Bill Vagell is an unusual collection of photos and facts that belongs on the shelf of every collector and every dealer in old toy trains.

ORDER TODAY **$6.50** PPD.

Dealer Inquiries Invited

MODEL CRAFTSMAN PUBL. CORP. **Reader Service** **4036**
6 EAST MAIN ST.
RAMSEY, N. J. 07446

Please rush me.....copies of Train Collectors Encyclopedia by Bill Vagell.

I enclose $.....in check or money order.

NAME.....

STREET.....

CITY.....STATE.....ZIP.....

Please print or type legibly

RAILROAD MODEL CRAFTSMAN RECOMMENDED HOBBY DEALERS

DEALERS, WRITE RAILROAD MODEL CRAFTSMAN, RAMSEY, N. J. 07446, FOR FULL INFORMATION

Arizona, Phoenix—Hobby Den
6012 N. 27th Ave. CR 7-2972

Arizona, Phoenix—Webster's Hobby Shop
521 E. Camelback Rd. AM 6-5343

Arizona, Tucson—Townsend's Art-Craft & Hobby Shop
2751 N. Campbell Ave. EA 5-0112

ARK., LITTLE ROCK—Bill Binz Co.
1622 S. University MO 3-9812

DEALERS—
For full information on low cost Dealer Directory advertising, write to Railroad Model Craftsman, Dealer Service Dept., Ramsey, N. J. 07446.

CALIFORNIA, BERKELEY
PFM, Suydam, Gem, Max Gray, Austin, NWSL, etc. All Cal-Scale; Kemtron, Main Line, C.V. Ambroid, Books, "Fleischmann, Marklin"; Dremel and many other tools.
BERKELEY HARDWARE
2109 University Ave. TH 5-0410

Calif., Buena Park—Train & Hobby Shop, Knott's Berry Farm, JA 7-1468

CALIF. 91505, BURBANK
Complete HO & HOn3 sales & service. Closed Tues. Open Sun. 10-4, Fri. 9-9. We carry large supply of brass locos.
BEANIE'S HOBBY JUNCTION
850 N. Hollywood Way 848-1267

Cal., Campbell—Holmes Hobby Center
2381 Winchester Blvd., Ph: 378-4552

Calif., Cudahy — Robbies Hobby Center
7613 Atlantic Blvd. Ludlow 8-0305

CALIFORNIA, EL CERRITO
It's "UNIQUE" for HO TRAINS
Open daily 12-9 Sundays 12-6
UNIQUE MODELCRAFT
10020 San Pablo Ave. LA 4-1314

Calif., Fremont—Hobbies Unlimited
41200C Blacow Rd. 657-6616

Calif., Fresno 3—Tom's Trains
2245 E. Hammond AM 6-3192

CALIF. 90631, LA HABRA
Approved Service Station. Lionel, American Flyer, Mantua-Tyco. We service what we sell. All gauges "O", "S", "HO", "TT".
HUGH'S HOUSE OF HOBBIES
1941 W. Central Ave. 213-691-1214

CALIFORNIA, LA PUENTE
Model Railroad Specialist. Try us for hard to get items and repair parts.
Open daily 10 to 6, Friday till 9.
CRAIN'S TRAINS & HOBBIES
1112 N. Hacienda Phone: 333-5502

Calif., Long Beach—Jiggs Hobby & Crafts. 938 South St., GA 2-2349

CALIFORNIA, LONG BEACH 13
Headquarters for your hobby. Complete stock of supplies for Model Railroads, Slot Racing and Ships. BOOKS!!
RAY'S HOBBY MODEL SUPPLIES
1222 Long Beach Bl. Ph: HE 6-4054

Calif., Los Angeles — Allied Model Hobby Shop
10938 West Pico Blvd. GR 9-2228

CALIF., LOS ANGELES
Model, Hobby, Craft
"Simply Everything"
Open Daily — Closed Thursday
"COLONEL BOB'S"
3707 W. Pico RE 1-3717
3709 W. Pico RE 1-3717

CALIF., LOS ANGELES
Exclusively Model Railroading
All Gauges
Service
TROXEL BROS. MODELS
216 S. Western Ave. Los Angeles 4

Calif., North Hollywood—The Roundhouse. 5116 Lankershim Bl., 769-0403

CALIFORNIA 94947 NOVATO
Model Rails bring us your needs. Beginners Welcome — Any Age — Any Scale Operating Layout. Open Fri. till 9.
RANKIN'S HOBBYLAND
1425 Grant Ave. PCR-NMRA 892-6060

CALIFORNIA, OAKLAND 19
United—Tenshodo—Akane—Gem—Max Gray HO exclusively
REED'S HOBBY SHOP
3129 High St. KE 4-1119

CALIFORNIA, OCEANSIDE
HO Model Railroad supplies. RTR & kits. We carry a complete line of parts in HO. Open 9-6. Fridays to 9 P.M.
ALAN'S BIKE & HOBBY SHOP
1732 So. Hill St. SA 2-6950

CALIFORNIA, PASADENA 8
HO, HOn3 Sales and Service
Kemtron-Cal-Scale-United-Tenshodo
We give S&H Green Stamps
WHISTLE STOP
3745 E. Colorado Bl. Sycamore 6-7791

CALIFORNIA, SACRAMENTO 14
Everything for the Model Railroader
Kits, Tools, Books
HOBBYCRAFTS
1616 Jay Street Phone 442-1293

Calif., San Bernardino — My Hobby Shop
24621 E. Baseline TUrner 9-1875

CALIF., SAN DIEGO
FRANK "THE TRAINMAN"
Lionel, American Flyer Service
Model Railroading Exclusively
4310 Park Blvd. CY 5-1611

Calif. 92105, San Diego — Gladys "Trains" Model Train Headquarters
4275 University Ave. Ph. 284-3449

Calif., San Diego—The Whistle Stop
3819 Sixth Avenue CY 5-7340

CALIFORNIA 91773, SAN DIMAS
Factory service, Lionel, Tyco, Aurora, Atlas. Complete Train repair service. Closed Monday.
ROY E. HOOPER LOCK & MODEL SHOP
211 W. Bonita Ave. LY 9-2602

CALIF., SAN FRANCISCO
Try Us.
FRANCISCAN HOBBIES
1935 Ocean Ave. JU 4-3919

CALIF., SAN FRANCISCO
Noriega Hobby Shop John's Trains
See us for trains, scale, tinplate
If it's good, we have it
3917 Noriega St. OV 1-7838

CALIF., SAN JOSE
Exclusively HO
Expert HO Repairing
9 to 6, Mon., Thurs.; Fri., 9 to 9
HUSTON'S HOBBY SHOP, INC.
335 S. First St. CY 4-6050

Cal., San Lorenzo—Hobbies Unlimited
17331 Hesperian Blvd. BR 8-1150

CALIF., SAN MATEO
California's most complete train store
Sales and service.
We give S & H Green Stamps
TRAINS—nothing but—TRAINS
138 W. 25th Ave 341-5846

CALIF., SUNNYVALE
The West's largest train store. Try us. Lionel, A.F., Maerklin, HO
Authorized service. 10 A.M.-9 P.M
SAT. 10 A.M.-6 P.M., SUN. 12-6
THE ENGINE HOUSE
672 Alberta Ave. CH 5-0609

CALIF., VAN NUYS
The one-stop shop for model railroaders. Books, Traction, PFM, Gray, Kemtron, Cal-Scale. We service what we sell. Daily 10-6. Mon. Fri. till 9
CLINT'S HOBBYS
14831 Burbank Bl. Ph. STate 0-5533

Colorado. Colorado Springs—
Lemle's Roundhouse
2410 No. Nevada (Rear) 632-1969

COLORADO, DENVER
HO Our Specialty
Tenshodo, United, Kemtron, Cal-Scale
Unimat & Accessories
CABOOSE HOBBIES
610 - 15th St. TA 5-1742

Colorado, Denver—Model Hobby Shop
3018 W. 38th Ave. GRand 8121

Conn., Branford — Branford Hobbies
Boston Post Road HU 8-9865

Conn., Bridgeport—Irv Yurdin's Train and Hobby Center
313 Fairfield Ave. ED 5-4545

CONN., COLUMBIA
Authorized Service Station for Mantua, Tyco, Walthers, Roundhouse & Athearn Stock, Pacific Fast Mail Bldg & Car Kits.
COLUMBIA CENTRAL HOBBY SHOP
Rte. #6, RFD #1 Phone: 228-9072

TRAVELING THIS SUMMER?
These and hundreds of other year round hobby dealers are fun to visit in your travels.

CONN., HARTFORD 3
New England's most complete HO Kits, Parts, Ready-to-Run & Imports. Airplanes, Boats, Craft Supplies. Daily 9:00 to 5:30—Thurs. to 9:00.
HOBBY CENTER
222 Pearl St. Phone: 247-1482

Conn., New Haven—Hull's Hobbies, Inc.
1203 Chapel St. near Howe UN 5-4319

CONN., NEW MILFORD
O, HO kits, locos, parts, scale lumber, TRACTION — Kidder, Miller, MTS, Suydam, Wagner, TOOLS—Custom bldg. & pnts. Closed Thurs.
NEW MILFORD HOBBY SHOP
48 Kent Rd., U.S. Rt., 7
203 EL 4-4789

CONN., STRATFORD
Home of Baldwin Model Locos. O Ga. Authorized Lionel & Am. Flyer Service. All Gauges from TT to ¾" Steam.
TRAIN EXCHANGE CENTER, INC.
3636 Main St. 378-5233

Fla., Melbourne—Ernie's Hobby Shop
308 New Haven Av. Phone PA 3-4610

CONN. 06492, WALLINGFORD
"O" Scale, HO, Tinplate, PFM, Kidder United, Max Gray, all lines Lionel Daily 10:30 AM-8 PM. Sat 'til 6.
SPORT & HOBBY CENTER
846 S. Colony 269-3019

FLORIDA, MIAMI
ORANGE BLOSSOM HOBBIES
HO — HOn3 — Traction — TT
See us for your modeling needs—from scratch-building thru R-T-R.
1975 NW 36th St. 633-2521

D. C., Washington 9 — Downtown Lock & Electric Co.
1314 14th St., N.W. 265-5990

FLORIDA, ORLANDO
Largest selection of HO, HOn3 in Fla. United, Tenshodo, Akane, North'stern, Ambroid, LaBelle, Walthers, Cal-Scale, Kemtron, Kadee, etc. Service, repairs.
COOPER'S HO DEPOT
2630 Edgewater Dr. 305-GA 5-8933

FLORIDA, TAMPA
THE MOST
CHESTER HOLLEY
3812-20 S. Himes Ave. 831-7202

Fla. 33406, West Palm Beach—
The Flagstop
1240-42 Pineway Dr. Phone 683-2632

GEORGIA 30030, DECATUR
HO Railroads, Model Planes, Model Car Racing. Open 11 AM - 11 PM
Metro Atlanta's FRIENDLY Hobby Shop
HOBBY HOUSE—DECATUR SPEEDWAY
130 E. Ponce de Leon 378-2253

ILLINOIS 60504, AURORA
Tenshodo, United, Suydam, N-W Shortline, Ken Kidder, Kemtron, Cal-Scale, Ambroid Kits. M. E. W. and many others. Daily 9-5:30, Mon. & Fri. to 8:30.
JOHN'S HOBBY SHOP
25 South River St. Ph: 312-896-0303

ILLINOIS, CHICAGO
Complete stock domestic & imported HO trains, equipment, parts & service. Std. Ga. parts, rewheeling & repairs.
BENTY HOBBY SUPPLIES
956 W. Belmont Ave. WE 5-9860

ILLINOIS, CHICAGO
Chicago's greatest stock of Model Trains in O-HO-TT-S gauges
Parts galore in SHIPS—PLANES
ALL NATION HOBBY SHOP
220 W. Madison St. Chicago 6

ILLINOIS 60601, CHICAGO
Downtown Hdqtrs. for HO RR.
Lionel-Tyco-Sets-Track-Access.
Also complete Road Race & Slot Racing
K & G PRODUCTS CO.
119 W. Lake St. FI 6-3238

Ill. 60641, Chicago—M&G Hobby & Cycle Shop
3445 N. Pulaski Rd. 539-5310

ILLINOIS 60651, CHICAGO
HO-HOn3-TT-On3-"000" Specialists
All Imports—Many unusual items
6-10 PM, Sat. 10-6 PM, Sun. 10-3
TRAINS, INC.
5710½ W. Diversey Ave. 637-7781

ILLINOIS, CHICAGO
TT, O, S, HO railroads, race cars. Complete stock of kits and supplies for boats, airplanes
TROST MODEL SHOP
3111 W. 63rd St. PRospect 6-1354

ILLINOIS BERWYN-CICERO 50
Complete Stock for Model Railroaders Kits, Parts, Tools, Supplies. Lionel Approved Service and Sales Station.
AIRPLANE MODEL & HOBBY SHOP
6129 W. Cermak Rd. OL 6-0224

ILLINOIS, DES PLAINES
PFM, Akane, Gem, Cal-Scale, Others. Complete Line Kits, Acc., Scratch Bldrs. Suppliers, R.T.R. Equip., etc.
THE TOY & HOBBY HOUSE
1486 Miner St. Phone: 827-6550

FOR THE BEST IN YEAR ROUND SERVICE, SUPPLIES AND TRAIN REPAIRS

RAILROAD MODEL CRAFTSMAN RECOMMENDED HOBBY DEALERS

DEALERS, WRITE RAILROAD MODEL CRAFTSMAN, RAMSEY, N. J. 07446, FOR FULL INFORMATION

ILLINOIS 60202, EVANSTON
"Everything in Trains." Military Miniatures, Custom Building & Painting.
THE HOBBY CHEST, INC.
615 Howard St. DA 8-4811

Illinois, Galesburg—Ray's Hobby
181 N. Cherry St. (Telephone) 4630

Illinois, Joliet — Walt s Hobby and Model Shop
32 W. Clinton St. Phone 6-1632

Illinois, Park Ridge—Bill's Craft & Hobby Shop
30 Main St.

Illinois 61571, Washington — Larry's Hobby House
417 Wagner Pl. Rear Phone: 283-2271

DEALERS—
For full information on low cost Dealer Directory advertising, write to Railroad Model Craftsman, Dealer Service Dept., Ramsey, N. J. 07446.

Indiana, Mishawaka — Bob's Hobby Shop
713 N. Main St. BLackburn 5-8111

INDIANA 47304. MUNCIE
HO-O: R-T-R, Kits, Parts, Sales & Repair — PFM-Lionel-Flyer — Approved Serv. Sta. Collectors Items. Buy-Sell-Trade. Open Daily 12-5; Sat. 9-5; Closed Sunday.
LINES ELECTRIC SERVICE
5809 Taylor Rd. Phone 288-2577

Ind. 47274, Seymour—Spencer's Food and Hobby—2015 Ewing Street Rd.

Kansas 66604, Topeka — Peterson Elect. Appl. Service.
1234 Clay St. Phone CE 2-1854

LOUISIANA, NEW ORLEANS 25
Tenshodo, United, Gem, Cal-Scale, etc. Daily 9:00-6:00 for Your HO Kits, Tools, Books, Parts, Builders Supplies, etc.
HUB HOBBY SHOP
2618 So. Broad Ave. Phone: 822-3914

MARYLAND, BALTIMORE
Baltimore's complete hobby shop. Over 20,000 HO items.
Lower Prices. Closed Wed.
Daily 12-8:45. Sat. 10-5:45
CITY-WIDE HOBBY SHOP
7913 Harford Rd. NO 8-9200

Maryland, Baltimore 2—M. B. Klein, 206 N. Gay St., LE 9-6207

MARYLAND, BALTIMORE 18
The Complete Railroad Shop
All Gauges—And Parts
We Assemble We Spray Paint
LLOYD'S
Model Railroad Headquarters
2201 N. Charles Street

MARYLAND, SEVERNA PARK
Most complete hobby shop Chesapeake Bay area. All scales & gauges model trains, cars, boats.
"Frank, The Trainman" S. P. Shop Center
THE DEPÒT
Box 800 301-MI 7-6602

Mass., Arlington—Bancroft Cycle & Hobby Shop
1377 Mass. Ave. MI 3-7878

MASS., BOSTON
HO-HOn3 Locos. Kits & Accessories
Most complete stock of HOn3 in Boston—6 days 10 a.m. to 7:30 p.m.
EAST BOSTON HOBBY SHOP
32-34 Bennington Street
E. Boston 28, Mass.

MASS., BOSTON
Model Railroads Exclusively. Lionel-American Flyer-Marklin. Complete line of HO.
Home of Tremont 26 Switch
ERIC FUCHS
26 Tremont Street Boston

Mass. 02189, East Weymouth — MacDonald Hobbycraft Co.
19 Fairmount Ave. Tel. 337-9185

MASS., LAWRENCE
This complete shop for the Model Builder. Open till 9 p.m. daily., Sat. till 6 p.m. HO Trains our specialty, plus Planes, Boats, Gas Engines, R/C equip.
MODELER'S HAVEN
80 Manchester St. Phone: 683-3222

MASS., LYNN
"New England's Foremost Hobby Shop" HO Trains—Model Motoring—Ships—Planes—Gas Engines—R/C Equip. Stamps & Coins for Collectors
LYNN HOBBY CENTER, INC.
18 City Hall Square LY 8-2382

MASS. 02346, MIDDLEBORO
Open Tues., Thurs., Fri. 7-10 P.M.
MODEL RAILWAY INTERCHANGE
15 Elm St. 947-3716

MASS., NORTH DARTMOUTH
Large Selection of HO Trains & Accessories. 1 PM to 10 PM Daily—10 AM to 6 PM Sat.
BILL DAYS-MODEL RAILROAD SERVICE
303 Slocum Rd.

Mass., North Easton—Lindstroms, 50 Elm St. CEdar 8-6224

Mass., Worcester 8 — Henry's Hobby House, 180 Front St., Pleasant 4-5604

Michigan, Battle Creek—Howard's Hobby Shop
33 Capital St., N. E. WO 8-8211

MICHIGAN, DEARBORN
All Gauges—HOn3, HO, On3, O Parts Kits, Tenshodo, United Kemtron. All Others. Open Thur. & Fri. 'til 9:00
STAR HOBBIES
22005 W. Outer Dr. Logan 5-9670

MICHIGAN, DETROIT
Complete line HO Scale Model. Lionel & AF-approved Service Station. Block north of Tuller Hotel. 9 to 5:30. Monday to 9.
DOWNTOWN TRAIN & CAMERA SHOP
122 W. Elizabeth St. WO 1-6932

Michigan, Detroit 21—Hobby Shop, Inc.
19924 Livernois DI 1-8872

MICHIGAN, DETROIT
Trains, Crafts, Models, Toys. Over 50,000 items. Over 500 locos. All gauges. Michigan's largest antique train collection. Open eve. Mon., Wed., Fri. until 9.
MODELS HOBBY SUPPLIES
22524 Woodward Ave. LI 3-2242

Michigan, Detroit—Northwest Detroit Hobby
18901 W. 7 Mile Rd. KE 3-6056

Michigan 48135, Garden City—Nankin Hardware 35101 Ford Rd. PA 2-5700

TRAVELING THIS SUMMER?
These and hundreds of other year round hobby dealers are fun to visit in your travels.

MICHIGAN, GRAND RAPIDS
Scale & Tinplate O - S - HO. Auth-Lionel - A.F. - Mantua - Tyco.
Sales & Service
Daily 9:30-5:30 Mon. & Fri. 9:30-9
CARL A. MEYERS HOBBY HOUSE
227 S. Division Ave. GL 6-9395

Michigan, Kalamazoo—Hiler's Model Railroad Shop
712 Southworth 342-8248

MICHIGAN, LANSING 15
Authorized Tyco & L.M.B. Service. Parts - Kits - Supplies. Open Sat. 9:30 a.m. to 7:30 p.m. Other times by appointment only.
JARCHOW'S HO REPAIRS
1511 Owen St. Phone: IV 9-9223

MO. 64836, CARTHAGE—Boomer Shack
1220 Oak St. FL 8-7421

MO. 64110, KANSAS CITY
Narrow Gauge Specialists and A complete line of HO
Daily 10 to 8:30 Sat. 9 to 5:30
K. C. HOBBY CENTER
5717 Troost Phone: JA 3-4596

MISSOURI 64131, KANSAS CITY
Model Railroad Headquarters
O-On3—S—HO—HOn3—000
Lionel-American Flyer-Lost Wax Foundry
SPOTLIGHT RAILROAD
7427 Troost Ave. Phone: HI 4-7331

Missouri, St. Louis 9—Charlie's Hobby House, Inc.
4611 Macklind Ave. FI 3-3836

Missouri, St. Louis 20—Henze's Hobby House
5405 Riverview CO 1-4480

MISSOURI, ST. LOUIS 18
Lionel parts for the home mechanic. Complete line of HO. American Flyer & Lionel.
JOHNSTON TRAIN SHOP
3118 Chippewa PR 2-8636

MISSOURI, ST. LOUIS 24
TINKER TOWN
Kits & parts for all gauges. Specialists in HO & TT. Also planes, boats & autos. Daily 9:30 to 5.30; Mon. & Fri. to 9:00.
9658 Clayton Rd. WY 1-0154

MISSOURI 63121, ST. LOUIS
Tenshodo-United-Ken Kidder-Max Gray Amer. Flyer-Lionel. Sales & Service Mon.-Fri. 9:30-9, Sat. 9:30-6
TOM'S TRAINS, INC.
125 Normandy Shop. Ctr., EV 2-8220

REPAIRS?
Most of the hobby shops listed in these pages offer quality repair work at fair prices. Patronize the one nearest your home.

MONTANA, HUNGRY HORSE
Our New Location.
Complete stock of O, S, OO, HO, HOn3, TT, Amer. Flyer, Lionel.
EASTERN MODEL RAILROAD CO.
Contact us for location at P.O. Box 148

NEBRASKA, LINCOLN
HO-HOn3-000-HOn2½. Nebraska's finest stock. Kits, locos, scratch parts
Daily 9:30-5:30. Thurs. 'til 8:30
CHICK BARTLETT'S HOBBY TOWN
134 No. 13th 432-3829

New Jersey, Elizabeth 3—Hobby Center
327 Morris ave. EL 2-1622

NEW JERSEY 07730, HAZLET
PFM, United, Tenshodo, Gem, Max Gray, Suydam Interurbans, Kemtron, Cal-Scale, Walthers, La Belle, HO Specialists.
INSTANT SPEEDWAY HOBBY CENTER
Airport Plaza Sh. Ctr. Highway 36

New Jersey 07107, Newark — Ace Hobby Craft & Fix It Shop
385 W. Market St. Phone: MI 3-4088

NEW JERSEY, PARSIPPANY
Authorized Service All Makes "O," "S", "HO" Trains. Open Sundays, Weekdays, evenings till 9 p.m.
RICH'S HOBBYTOWNE, INC.
Phones: DE 4-2666,
U. S. Highway 46 CA 6-7909

New Jersey, Plainfield—Craftsman Model Shop
300 Park Ave. Tel. PL 6-6089

NEW JERSEY, RAMSEY
TT, HO, S, O Scale. Cal-Scale, Kemtron Fittings, Auth. serv., Lionel, AF, PennLine, Tyco, Marklin, daily 10 to 8, Fri. 10 to 10, Sun. 10 to 6.)
HI-WAY HOBBY HOUSE
Route 17 DA 7-0075

New Jersey, Red Bank—Hobby Headquarters
62 White St. Red Bank 6-4451

NEW JERSEY, EAST RUTHERFORD
Rutherford's leading R.R. Headquarters HO, S, O gauges, Lionel, Gilbert, Parts, Gargraves track.
PAUL'S HOBBY SHOP
540 Paterson Ave. GE 8-0192

New Jersey, South Orange—Village Hobby Shop
14 Sloan Street SO 2-6939

NEW JERSEY, TOMS RIVER
HO, S, O—Cal Scale, PFM, Tenshodo, Tyco, Penn Line. Daily 10-9, Sun. 10-6.
HOBBY CITY
Route #37 341-1991

NEW JERSEY, TRENTON
25 years of Model Railroading. Paradise for Hobbyists! Collector items, too.
TRENTON HOBBY CENTRE
Daily 10-5:30, Thurs. till 9.
237 E. State St. EX 3-1644

NEW JERSEY, WEST ORANGE
HO Trains Exclusively. Kemtron - Cal-Scale fittings, other access. Open eve. 6:30 to 9:30, Sat. 10 a.m. to 6 p.m.
THE WHISTLE STOP
17 Tremont Ave RE 1-6373

NEW JERSEY, WESTMONT
Largest stock of quality HO, featuring Tenshodo, United, Max Gray, Gem, Hobbytown, Cal-Scale, Kemtron, Walthers. Scratch builders supplies.
SATTLER'S
14 Haddon Ave. 854-7136

ALBUQUERQUE, NEW MEXICO
O, HO Standard Narrow Gauge Brass Imports & Dom. Parts & Supplies. Planes-slot cars-science. Open eve. & Sun.
HOBBY KORNER
6693 - 4th NW (US85N) 344-3267

NEW YORK, BATAVIA
HO - Trains Specialist. Tenshodo - L.M.B. - Mantua - Athearn. Open 1 p.m. to 9 p.m., except Wed., Sun., holidays.
BUDDY'S ROUNDHOUSE
10 Main St FI 2-8241

NEW YORK 13905, BINGHAMTON
HO - United - Tenshodo - Lionel - Hobby Kits - Sales & Service
Slot Racing. Large 200' Track
KERN'S HOBBIES
7 Main St. 607-722-7507

NEW YORK 10465, BRONX
Hdqs. for Model Trains. All Gauges. Slot Racing, Arts, Crafts, Bike Acc. Archery, Science-Chem, Model Repairs
THROGS NECK HOBBY CENTER, Inc., 3482 E. Tremont Ave., 824-7072

NEW YORK, BUFFALO 14215
For the best in HO (Tenshodo, Akane, Max Gray, Ken Kidder, Tyco, Athearn, Cal-Scale, Kemtron, Selley.) Mon., Thur., Fri. 10-9; Tues. & Sat. 10-6. Closed Wednesday.
FIELD'S HOBBY CENTER
3177 Bailey Ave. TF 6-7832

NEW YORK, BUFFALO
Buffalo's original and most complete Hobby Shop. Open daily 9:30 to 5:30; Thurs. & Fri. 'til 9 p.m.
HOWARD E. RUTH HOBBIES
1466 Genesee St. TX 6-6850

New York 14871, Elmira (Pine City)
C. E. Farmer HO Supplies and Service, 963 Sebring Ave. RE 2-6673

NEW YORK, FRANKLIN SQUARE
All kinds of repairs—Lionel, Amer. Flyer, etc. Kits & parts — Tenshodo, United, Gem, LaBelle.
Open Mon. & Fri. Eve.
FRANKLIN HOBBY SHOP
81 Franklin Ave. 516-FL 4-4470

FOR THE BEST IN YEAR ROUND SERVICE, SUPPLIES AND TRAIN REPAIRS

RAILROAD MODEL CRAFTSMAN RECOMMENDED HOBBY DEALERS

DEALERS, WRITE RAILROAD MODEL CRAFTSMAN, RAMSEY, N. J. 07446, FOR FULL INFORMATION

New York, Freeport—Nassau Hobby Center
35 Church Street.

NEW YORK, HUNTINGTON
Model Railroad Specialists. Tremendous Stock of Parts—Try us! Largest Marklin Display on L. I.
THE CABOOSE-HUNTINGTON TRAIN CENTER
219 Wall St. at S'thdown HA 7-8288

NEW YORK, NEW YORK
HO, Lionel, A.F., Marklin, Sales & Ser. Radio Control Equip. Planes, Boats, Crafts. Daily 9 to 9; Sun. & holidays 11 to 7.
HOBBY MART
Port Auth. Bus Term. (heart of NYC)
625—8th Ave. BR 9-5869

N. Y. 10036, NEW YORK
30,000 Items in All Gauges—World's Largest Train Store—We Buy, Sell, Trade Old Trains—Service All Makes
MODEL RAILROAD EQUIPMENT CORP.
23 W. 45 Street JU 2-2760-1-2

NEW YORK, NEW YORK
Trains from the world over! Accessories. parts and repairs, all gauges. World's leading hobby house, 5 fl'rs.
POLK'S HOBBY DEPT. STORE
314 5th Ave. at 32nd St. BR 9-9035

N. Y. 11419, RICHMOND HILL
United, Tenshodo, Gem, Max Gray. Largest Selection in New York. Cal-Scale parts.
TIP TOP HOBBY SHOP
111-11 Liberty Ave.
835-0963 or 641-9428

New York, Ridgewood—Nagengast Hardware
6802 Fresh Pond Rd.

New York, Rochester—Carl's Hobby House
1310 Clinton Ave., N CO 6-4706

NEW YORK, ROCHESTER
SCALE—Tinplate, Lionel Factory & American Flyer, Approved Service. Mfrs. of Gargraves Trackage. Exclusively model railroading equipment.
"TRAIN DOCTOR" GARDNER
2261 Dewey Ave. UN 5-6574

New York, Syracuse—Model Railroad & Hobby Center
219 E Fayette St. GR 1-2000

N. Y. 14150, Tonawanda — Hils' Hobby Haven
28 Sharon Dr. NX 3-7291

NORTH CAROLINA 27609, RALEIGH
Complete Stock for Model Railroaders Kits, tools, supplies, R/C equipment Model planes & boats
NORTH HILLS HOBBY SHOP
4257 Six Forks Rd. 919-787-2364

OHIO, CINCINNATI (WESTWOOD)
Exclusively Model Railroading
Daily 7-9 p.m.
Saturdays 10 a.m. - 6 p.m.
THE MODEL RAILROAD SHOP
2953 Montana Ave. 513-661-9444
(Just off Harrison Ave., U.S. 52)

Ohio, Cleveland—Red's Hobbycraft
7804 St. Clair Ave. HE 1-0719

OHIO, CLEVELAND
HO Trains Exclusively
You must be satisfied or your money cheerfully refunded.
BARON'S HOBBY SHOP
898 E. 222nd St. RE 1-7775

OHIO, CLEVELAND
Complete HO stock, domestic & foreign, Slot Racing, Airplanes, Boats, radio control, motors, supplies, crafts.
NATIONAL HOBBY, INC.
4526 Lorain Ave. AT 1-3600
5238 Ridge Rd. (Parma) SH 9-4750

OHIO, CLEVELAND
Ready-to-Run HO, Lionel - Flyer. Available parts always in stock. Rare Lionel items; sales-service. TRADING OUR SPECIALTY.
TRADING POST
4384 Pearl Rd. ON 1-7300

Ohio 44116, Cleveland (Rocky River)
"Ho" R. R. & Trolley Supply Co.
19335 Laurel Ave. 333-3031

OHIO 43215, COLUMBUS
HO train & race sets. Tenshodo, United, Tyco, Gem, Cal-Scale, Kemtron. Brass & wood shapes. Airplanes, Plexiglas. Daily to 5:30. Mon. and Thursday to 9 P.M.
FRANK P. HALL, INC.
185 S. High St. 224-2188

OHIO, COLUMBUS 4
HO our Specialty - Working Layout - Model Planes, Car, Ships - Crafts and Science - Greeting Cards - Party and Gift Wrap Papers.
STRETE HOBBIES
3655 Sullivant Ave. BR 9-6959

OHIO, COLUMBUS
HO Kits, sets, ready to run, parts, service, operating layouts.
Mon.-Fri. 12-9; Sat. 10-9
HOBBYLAND
Graceland Shopping Ctr. 263-8500
Great Eastern Shop'g Ctr. 866-8500
Amos Shopping Center 267-8500

Ohio, Lakewood—Wings Hobby Shop, Inc.
17114 Detroit Ave. AC 1-0926

Ohio 45042, Middletown — Danny's Train Repair
208 Bellemont St. 423-2040

OREGON, HILLSBORO
Akane, P.F.M., Cal-Scale, LMB. Specializing in HO - Real Brass Buys. Open 9:30 a.m. to 8 p.m., Fri. till 9
HILLSBORO HOBBY SHOP
321 E. Main St. MI 8-3788

Pa., Allentown—Bloch's Hobby
918 Hamilton St. HE 2-9975

PA., ALLENTOWN (Fogelsville)
Largest stock HO in area. Operating layout. R/C boats & planes, Indian lore. Acres of parking. Daily 10-10 and Sundays 1-10.
DON MOHR'S HOBBYLAND
6 Miles West on Rt. 22 EX 5-2842

PENNA. 16601, ALTOONA
HERBY'S HOBBY SHOP
1435 11th Ave. 944-8834

PA., GLENSIDE
One Of America's Most Complete Stocks Of HO Cars, Locos & Accessories. Open to 11:00 PM Daily
FUN TYME HOBBY CENTERS, INC.
123 S. Easton Rd. TU 5-3030

PENNSYLVANIA, GREENSBURG
24 Hr. guaranteed repairs — All gauges of Trains — Sales & Service Authorized by all major companies.
COLLIER TRAIN SERVICE
203 W. Pittsburg St. TE 4-9504

Pa., Hazelton—Hobby Haven
128 N. Wyoming St.

Pa. 17740, Jersey Shore—
"The Caboose"
R. D. 1 398-0702

Pa. 18704, Kingston—
Jack's Hobby Center
Narrows Shopping Ctr. 287-1397

PA., LEBANON
Complete HO gauge Model Railroad Shop. We repair, custom build, service, trade. Tenshodo. Gem. Akane. LMB, KTM. Open evenings.
HOBBY HOUSE
1300 Florence St. CR 3-5461

PA. 7, PHILADELPHIA
Marklin, Fleischmann, Lionel and AF Complete line HO kits, accessories. Authorized Serv. Station for all trains
NICHOLAS SMITH
60 North 11 St. WA 5-0521

Pa., Philadelphia—Richard Francis Hobbies
5815 Woodland Ave. SA 9-1266

PA. 19102, PHILADELPHIA
PFM-GEM-Kidder-LMB-Hobbytown-Red Ball-Bowser-CV-Walthers. Skillful Repairs, Model Builders Suppliers—Lettering.
TOM THUMB HOBBY SHOPS
122 S. 16th St. LO 7-7194

PA., SOUTHAMPTON
HO Sets and Kits, Accessories; AF; Rokal Mantua-Tyco Authorized Service Station
BROADBENTS
44 Second St. Pike EL 7-0446

Pennsylvania, Sunbury—Schraeder's Corner Store
472 N. 4th Street AT 6-6841

PA., UPPER DARBY
TODD'S FOR TRAINS
Largest, most complete "HO" & "O" Train & Traction Stock in Phila. area. 25 yrs. Train Sales & Service. Cust. Wk. Scratch Bldrs. Supplies.
7036 Terminal Sq. FL 2-1011

SO. DAKOTA 57104, SIOUX FALLS
Authorized sales and service in HO, S, and O Scales. Everything in Model Railroading from Tinplate to Custom Lettering and Painting.
THE INLAND EMPIRE SYSTEM
803 S. Duluth Ave. 334-8603

Tennessee, Nashville—Meacham Variety Store
2412 Gallatin Rd. Phone: 262-9636

TEXAS, DALLAS
Trains — Imports — Kits—Ready to Run—Acc.—Planes—Race Cars—Games—Crafts. Service on anything we sell.
BOBBYE HALL'S HOBBY HOUSE
4822 Bryan St. TA 1-2550

TEXAS 78201, SAN ANTONIO
Branch Line Train Center, 2111-A Blanco Rd.

TEXAS 78212, SAN ANTONIO
See our 300' HO Model Railroad and the Construction of our 1½ Scale Live Steam Railroad.
CES & RONNIE'S HOBBYLAND
1420 N. McCullough PE 4-5952

TEXAS, SAN ANTONIO
Operated by a modeler for model builders. Terrell Plaza Center on U.S. 81. Open Thursday evenings.
DICK'S HOBBY SHOP
113 Plaza Gordon TA 6-7941

VIRGINIA, ARLINGTON
HO, S, O scale kits, layout supplies, parts, tools. Lionel. Amer. Flyer.
Hours: 10:30-7.
Mon., Thurs., Fri. to 9
ARLINGTON HOBBY CRAFTERS
625 N. Glebe Rd. JA 2-6442

Va. 23503, Norfolk — Ocean View Hobby Shop.
404 E. Ocean View Ave. JU 7-5374

Va. 23504, Norfolk — Toy Craft
3904 Granby St. Madison 2-6043

Va. 23505, Norfolk—Zephyr Miniatures Wards Corner
123 W. Little Creek Rd. JU 8-1934

Va., Richmond—Bob's Hobby Center
3002 W. Cary St. Phone: 353-6566

WASHINGTON, SEATTLE
Complete line of Trains - Airplanes - Ships - Racecars - Supplies
HOBBY CRAFT
The Bon Marche MA 4-1234

WASHINGTON, SEATTLE 66
Complete line HO kits, accessories, tools. Import locos PFM, Gray, Austin, Akane, NWSL. Open daily 10-6, except Mon. & Fri. 10-9 p.m.
BURIEN HOBBY CENTER
619 S.W. 152nd St. CH 2-8410

WASHINGTON, SPOKANE 10
HO Model Trains
Airplanes, Boats, Kits and Supplies
Open Friday Evenings
MAURIE'S MODEL SHOP
Bon Marche, Main & Howard
RI 7-5111

WEST VIRGINIA, BELLE
Authorized Mantua Tyco Dealer. Hobby Center for Kanawha Valley Trains, Planes, Crafts. Train Repairs Custom Building
BROWNIE'S
MODEL RAILROAD EQUIP.
2001 W. Riverview Dr. WI 92-385

WISCONSIN, MILWAUKEE
Complete stock of Walthers O & HO kits, parts and decals. Monday to Friday 8 to 4:30.
TERMINAL HOBBY SHOP
1247 N Water St. BRoad'y 1-7364

WISCONSIN, MILWAUKEE
HO Specialist Tenshodo, Gem, Cal-Scale, Kemtron, United, 99% Complete One Stop Shop for all hobbies.
HOBBY HORSE
Capitol Ct. Shopping Ctr., UP 1-9760

Wisconsin, West Allis 14—Garman's Hobby Shop
8216 N. National Ave. GR 6-1412

ONTARIO, LONDON
Live Steam Rail 1" and 1½" Scale
All Canadian Alv-Aloy
Accessories for Cars, etc.
DUNDAS HOBBY SHOP
804 Dundas St. Phone: 438-3975

ONTARIO, ST. CATHARINES—NIAGARA CENTRAL HOBBIES
236 St. Paul Street 684-7355

Ontario, Toronto, 17—Leonard's Hobby Centre
1586 Bayview Ave. Phone: 483-8825

ONTARIO, TORONTO 12
Athearn, Mantua, Hornby, Rivarossi, Tenshodo, etc. Authorized Train Repairs. Mon. to Sat. 9-6; Thur. & Fri. to 9 p.m.
NORTH YORK HOBBIES & CRAFTS
1910 Avenue Road RU 1-4139

Ontario, Windsor—Janisse's Hobby & Toy Shop
2017 Wyandotte St., W CI 2-8817

ONTARIO, TORONTO 7
Canada's only exclusive train store. New, used and rebuilt trains. Guaranteed repairs.
GEORGE'S TRAINS
510 Mt. Pleasant Road
Phone: 489-9783

ONTARIO, TORONTO 12
Canada's HO Gauge Specialists
Always First with the Newest
We Service What We Sell
THE MODEL TRAIN SHOP
2387 Yonge St. 483-0967

If your local dealer does not stock copies of Railroad Model Craftsman each month or if he continually runs out before you can obtain your copy, send us his name and address. We'll make sure he receives a complete supply of Railroad Model Craftsman magazines each month, just as soon as they are issued. Put the name and address of your dealer on a post card and send to:

Circulation Department, Railroad Model Craftsman, Ramsey, New Jersey 07446

FOR THE BEST IN YEAR ROUND SERVICE, SUPPLIES AND TRAIN REPAIRS

Subscribe Today

ENJOY MODEL RAILROADING 12 MONTHS OF THE YEAR

A subscription brings RAILROAD MODEL CRAFTSMAN right to your mailbox every month mailed flat in a rainproof sealed poly-bag, perfect protection against dog ears and torn covers. (Foreign copies in envelopes at present.)

RAILROAD MODEL CRAFTSMAN is filled with everything you want to know about model railroading. Recent issues have contained construction articles on styrene scenery, four car rectified trolley operation, modern engine terminals, locomotive conversion and detailing, and much more.

And there have been plans for camelbacks, Jersey Central suburban tank locos, low hood diesels by Alco, GE, and Electro-Motive, plus many older designs by Baldwin, Lima-Hamilton, Fairbanks-Morse, and the big makers. There have also been plans for the new big freight cars and there are more coming.

In addition, each issue of RMC contains picture stories of top model railroad layouts, models, plus special departments and reviews of new model railroad products.

You'll be glad you sent your check or money order in today for your three, two, or one year subscription to the pioneer model railroad magazine.

SUBSCRIBER SERVICE **3066**

Mail to: Miss Elizabeth Dickson, Circulation Manager, Railroad Model Craftsman, 6 East Main St., Ramsey, N. J. 07446.

Please include your RMC address label to insure prompt service whenever you write about your subscription.

To subscribe: mail this form with your payment, and check ☐ new subscription ☐ renew my present subscription.

Subscription rates in U.S.A. and Canada: 1 Year, $5.00; 2 years, $9.00; 3 years, $12.00. Add $1.00 per year for all other countries.

If you don't want to mutilate magazine, send your order and remittance in a letter.

ATTACH LABEL HERE

FOR CHANGE OF ADDRESS

If you're moving, please let us know six weeks before changing your address. Place RMC address label here, print your new address below. Be sure to include Zip Code. Canadians give city Zone No., if any.

name

street

city state zip

Please print or type legibly

Do not write in this box

R

Advertising Index for August 1966 Issue

A

All-Nation Line 51
Ambroid Company 50
America's Hobby Center 7, 8, 9
Amron Products Company
Associated Hobby Manufacturers 13
Athearn, Inc. 3
Atlas Tool Co. 11
Austin, M. B. 11

B

Baldwin Model Locomotive Works 53
Benty Hobby Supplies 51
Black, Edward 58
Bowser Manufacturing Co. 59
Brotherhood of Trainmen 6

C

Cal - Scale 12
Campbell Scale Models 53
Central Valley 57
Champion Decal Company 59
Cliff Line 58

F

Frederick Manufacturing 6

G

Gardner "The Train Doctor" 52
Gray, Max 53

H

Hobby House, Inc. 2

K

Kadee Metal Products Co. 58
Kidder, Ken 14
Knudsen Publications 10

M

Lee's Hobby 57
Main Line Models 6
Mil-Scale Products 52
Model Craftsman Pub. Corp. 60, 62, 67
Model Die Casting Co. 12
Model Engineering Works 52
Model Railroad Products 58

N

Northeastern Scale Models 12

P

Pacific Fast Mail 68
Permacraft Products 14
Polk's Hobbycraft 15
Preston, Nathan R., & Co. 5

R

Railroad Model Craftsman 55, 62, 66
Real-Like 51

S

S Gauge Herald, Inc. 58
Sattler's HO Depot 54
Schopp, William 11
Selley, Inc. 54
Smith, Nicholas 14
Special Shapes Company 54
Suydam, E., & Co. 57
Swift Line 54

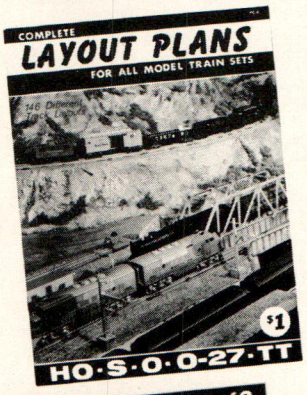
T

Thorley Hoople Toy Co. 54
Trackside Specialties 51
Transit Data, Inc. 10
Tri-Delt Sophisticated Electronics 52
Trost Model Craft & Hobby 52
Tru-Scale Models 12

W

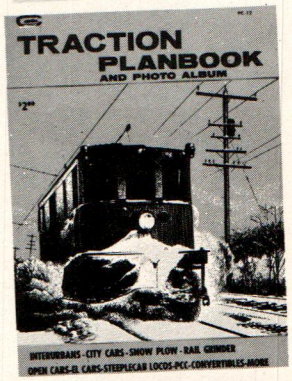
Walthers, Wm. K., Inc. 51
Western Model Distributors 53

Your Hobby Dealer Has Carstens Hobby Books



NEW RAILROAD ATLAS—RMC EDITION $3.95

Latest 1965 version of famous Rand-McNally Railroad Atlas, in a special Railroad Model Craftsman edition now listing all fifty states and latest railroad mergers. Contains special tables giving miles of track operated. Excellent for modelers and railroad enthusiasts.



TRACTION PLANBOOK & ALBUM.....$2.00

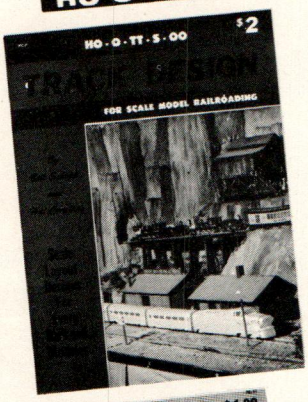
A cyclopedia of 62 different traction plans from the oldest single trucker to the latest in PCC and rapid transit types. Over 80 photos. Acclaimed by trolley fans everywhere as a must book.

ROLLING STOCK PLAN BOOK.....$2.00

New revised edition with more plans, 119 different freight, passenger, and non-revenue cars in all. Also 68 prototype car photos. A book for scratch builders, detail artists, and railfans.

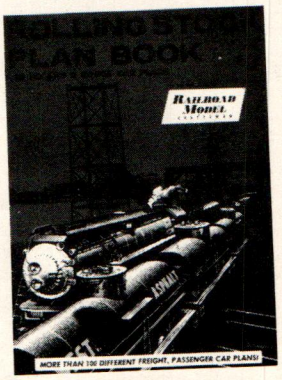
LIONEL STANDARD GAUGE ERA.....$2.00

Photos and text describing almost every major loco and car type made by Lionel in Standard Gauge from 1906 to 1941. Invaluable reference for collectors, armchair buffs, and dealers.



TRACK DESIGN.....$2.00

Scale layout designs to fit any space from 12 to 2700 feet. The best of the Layout Doctor's designs. Primarily for modelers who like to lay their own track but loaded with data for all railroaders. Covers all types of layouts: branches to super main lines.

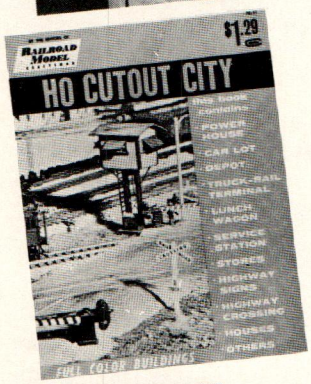


COMPLETE LAYOUT PLANS.....$1.00

A trackbook for those who prefer sectional track, whether in OOO, TT, HO, 0-27, O or Super-O. 146 track designs to fit every budget, space, or desire. Many shown in color complete with scenic suggestions. Special introductory chapter covering special problems.

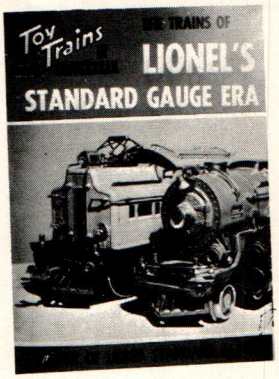
HO CUTOUT CITY.....$1.29

Latest printing of the famous RMC cutout books. Contains full color cutouts for making a complete HO city with stores, gas-station, railtruck depot, crossing gates, power house, over 100 different highway signs, etc. Printed on heavy card, one side only. Also suitable for use with HO motoring sets.



NYO&W EMPLOYEE TIMETABLE NO. 44, JUNE 1898 .....$2.00

Authentic 16 page reproduction of rare 1898 NYO&W employee timetable No. 44, effective June 26, 1898. Measures over 8x14". Lists Chicago Express, milk and freight trains. Ideal for framing. A must for collectors, railfans, modelers, historians.

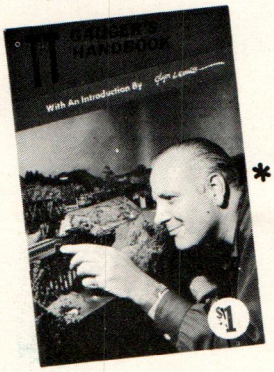


TT GAUGERS HANDBOOK.....$1.00

Every TT gauger needs this book. Glyn Lewis tells how he built his Hudson & Mohawk RR in 1/10 scale. Also plans for locos, cars, structures, trestles.

RAMSEY — 1905.....$1.50

Gorgeous full color lithograph print of Don Wallworth's painting showing the Erie depot at Ramsey, N. J. as it was in 1905. Mailed in protective tube, printed one side of sheet only. 11" x 16"



*

CARSTENS
A PUBLICATION

IF YOUR LOCAL DEALER CAN'T SUPPLY YOU, ORDER DIRECT USING THIS CONVENIENT ORDER BLANK

NEW YORK, ONTARIO & WESTERN
RAILWAY COMPANY.
TIME TABLE No. 44.
Taking Effect 12.01 A.M. Sunday, June 26th, 1898.

MODEL CRAFTSMAN PUBLISHING CORP. Dept. 4055
P. O. Drawer C
Ramsey, New Jersey 07446

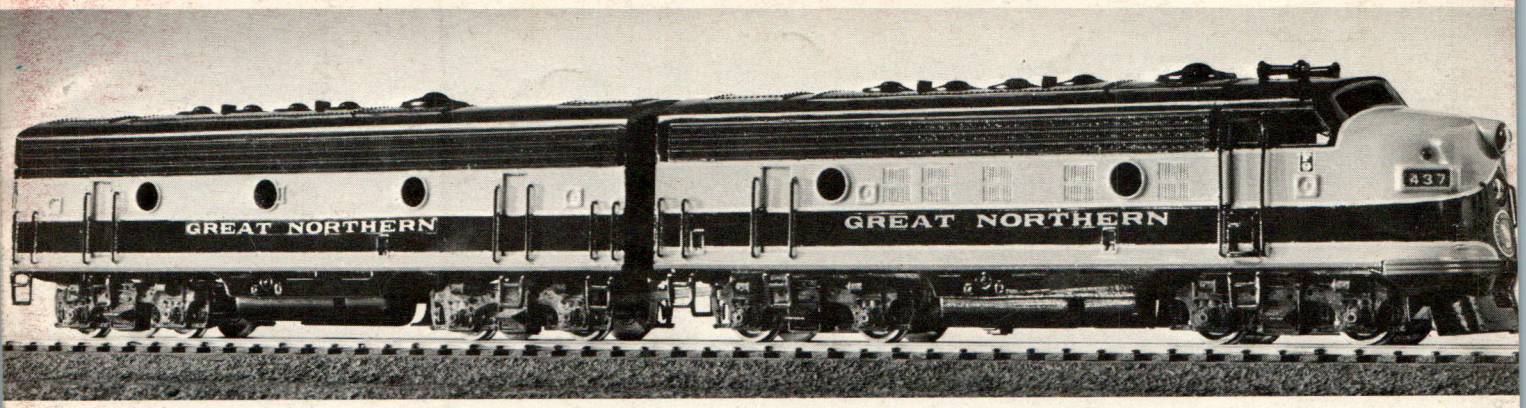
My dealer can't supply me. Please send the colorful Carstens Hobby Books I have checked below. I enclose $..... in check or money order. I understand that if I am not completely satisfied I can return any of the books within 5 days for full credit.

- ☐ Rolling Stock Plan Book, $2.00
- ☐ Track Design, $2.00
- ☐ Complete Layout Plans, $1.00
- ☐ TT Gaugers Handbook, $1.00
- ☐ Ramsey-1905 Print, $1.50
- ☐ Traction Plan Book, $2.00
- ☐ HO Scale Cutouts, $1.29
- ☐ Lionel Standard Gauge Era, $2.00
- ☐ 1898 NYO&W Time Table, $2.00
- ☐ RMC Handy Railroad Atlas, $3.95

Name .....

Street .....

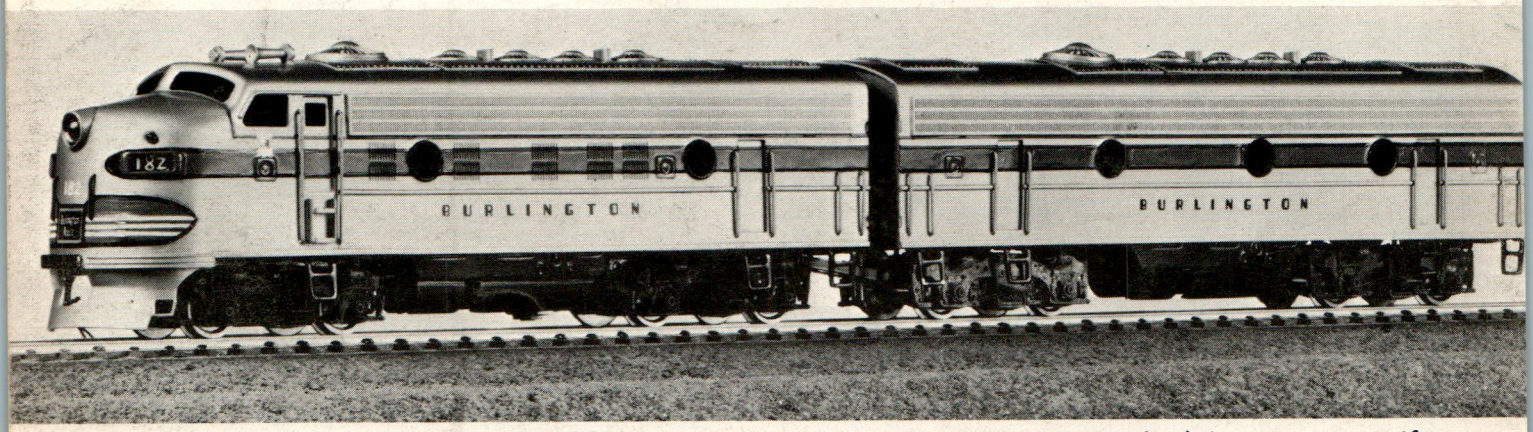
City..... **State**..... **Zip**.....



Tenshodo
"THE MARK OF QUALITY"

If asked, we'd guess that a number of factors contribute to the acceptance and popularity of Tenshodo's EMD "F-9" . . .

Power: Dependable and plenty of it with Tenshodo's MH-5 motor powering only the "A" Unit. Add the "B" Conversion Kit for double power if it's double consists that take your fancy.



Color? There's no beating the quality of Tenshodo's accurate uniform paint schemes.

Size: A "right" fit on the normal pike boasting modern "growlers". Length 14½" overall; weight 36 oz.; minimum radius 15". Trestles and turntables take it. It takes the curves.

Prototype? Pretty hard to model a road for whom Tenshodo hasn't modeled an "F-9" . . .

. . . . . AT&SF (Passenger), B&O, C&NW, C&O, CB&Q, D&RGW, GN, NYC, PRR(Passenger), SP "Daylight", SR, & UP

Price: In the USA, A plus B Unit, A powered, $37.95

PFM

In the USA: P.O. Box 57
Edmonds, Washington 98020

PACIFIC FAST MAIL

In Canada: 5816 Cambie
Vancouver 15, B.C.